March 1996 $5.00
Canada $8.00

Independent Endeavors

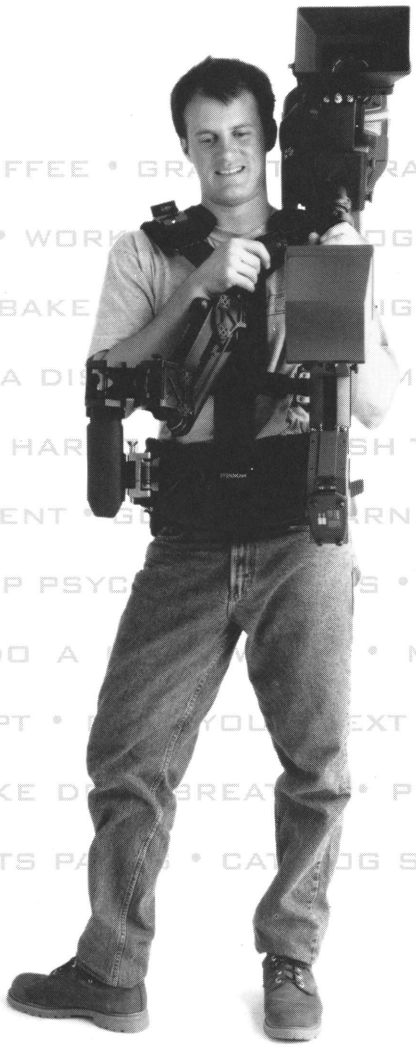
American Cinematographer

Stone, Richardson Conspire On *Nixon*

The Coen Bros., Deakins Tell Icy Tale in *Fargo*

03
0 74470 12797 0

OUT OF THE BOX AND READY TO ROLL. NOW, WHAT ARE YOU GOING TO DO WITH ALL THAT EXTRA TIME?



If you'd like to have a little more time on your hands, look at the Master Series Steadicam. We've simplified so many adjustments, you won't know what to do with yourself. Now every critical balancing point on the arm, sled and vest can be adjusted with no tools. So you'll never have to fumble for color-coded hex wrenches again. Our new motorized stage and micromic gimbal make camera balancing a breeze. And because our sled is dynamically balanced, you'll find minor changes never become major hassles. So if you'd like to enjoy more free time, call 1-800-311-2463. Hey, maybe you can take up a hobby or something.

STEADICAM®
THE MASTER SERIES

Steadicam® is a registered trademark of Cinema Products Corporation 3211 South La Cienega Boulevard, Los Angeles, CA 90016 (800) 311-2463 or (310) 836-7991 Fax (310) 836-9512

(păn´ə-vĭzh´ən)
HOLLYWOOD
6779
Hawthorn
Hollywood
CA 90028
Phone
213.464.3800
PANAVISION
HOLLYWOOD

WRS Announces the 2nd Annual Laura Napor Film Grant.

As part of its ongoing commitment to support and encourage independent filmmakers WRS one of the industries oldest and largest full-service motion picture, sound, and video facilities, established the WRS/Laura Napor National Film Grant and the WRS/Pittsburgh Film Grant last year.

The National Grant consists of:
$5,000 worth of film processing at WRS
$5,000 worth of Kodak film
$5,000 worth of lighting and equipment rentals
by Performance Lighting, Inc.

The Pittsburgh Grant is specifically designed for filmmakers residing within a one hundred mile radius of WRS's headquarters in Pittsburgh. The Pittsburgh award consists of $2,500 grants in the same categories as the National Award. Judging is based on submission of a story treatment of no more than two typewritten pages, double spaced. Any longer submission will not be considered. Entries may be accompanied by a VHS or 3/4" copy of the entrant's most recent work if available. (If you desire return of your cassette, you must include self-addressed, stamped packaging, otherwise material cannot be returned.)

Applications must be postmarked no later than May 1, 1996 and should include the applicant's name, address and phone number.

Five finalists for each grant will be notified by June 1, 1996. The winner will be announced at a reception to be held at the WRS facility in Pittsburgh June 21, 1996.

WRS MOTION PICTURE AND VIDEO LABORATORY

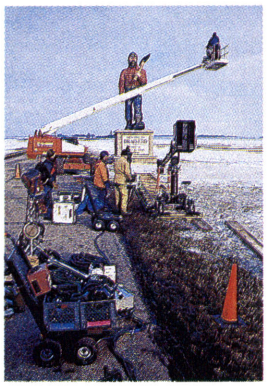
1000 NAPOR BOULEVARD, PITTSBURGH, PA 15205 (412) 937-7700

The International Journal of Film and Electronic Production Techniques

March 1996 Vol. 77 No. 3

American Cinematographer

Features



28

28 Cold-Blooded Scheming
Fargo offers wry twist on film noir

36 A Splintered Vision of America
Nixon examines a president's fall from grace

46 Henri Alekan: The Doyen of French Cinematography
ASC's International Award honors exquisite career

53 The State of Independents
A special section on seat-of-the-pants filmmaking

54 An Economy of Sarcasm
The Suburbanators skewers the soft life

56 One from the Heart of Texas
Romance runs amok in *Seeking the Cafe Bob*

60 *Rude* Awakening
Festival fave boasts stylish visuals

68 Days of Wine and Hypnosis
Idyllic setting turns ominous in *The Killing Jar*

73 Giving Back to *Dorothy Day*
Creating a period feel with modest funds

60

79 Aardman Animations: A Perpetual Stop-Motion Machine
Giving life to a mirthful menagerie of creatures

85 Top of the Charts
New telecine chart facilitates film-to-tape transfers

Departments

10 Letters
12 Digital Perspectives
16 Production Slate
91 On the Spot
93 New Products
96 Points East
98 Books in Review
100 Classified Ads
106 Ad Index
108 In Memoriam: William Clothier, ASC
109 In Memoriam: Hugh Gagnier, ASC
110 ASC Members Roster
111 From the Clubhouse
112 Filmmakers' Forum

On Our Cover:
President Richard Nixon (Anthony Hopkins) seeks solace in the arms of his wife, Pat (Joan Allen) in director Oliver Stone's *Nixon*, an epic psychological drama with stunning photography by Robert Richardson, ASC (photo by Sidney Baldwin).

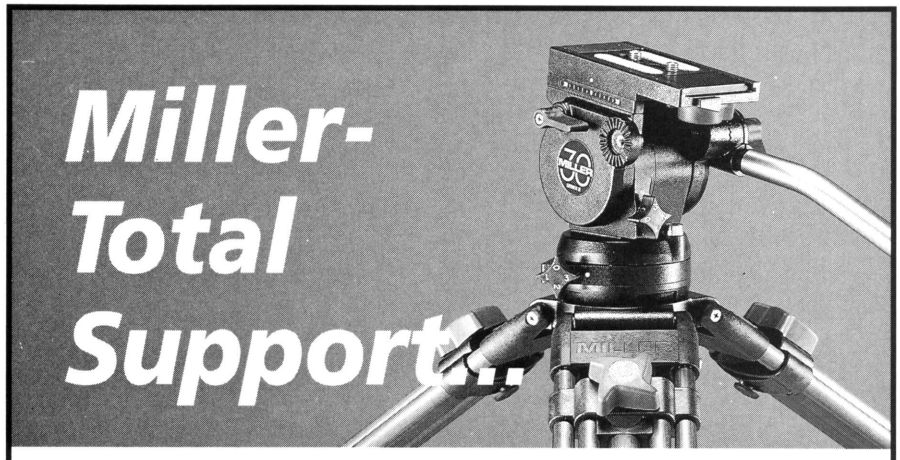
Contributing Authors:
Stephen Ashton
Benjamin Bergery
Merle Bertrand
Marc Bruno
Michael X. Ferraro
John Gainsborough
Ric Gentry
Chris Probst
Russell Steen

215 CALL CAM
(215) 225-5226

Call for free information on the 200 best Steadicam® operators in the world.

The next Steadicam Workshop in the Spring of 1996.

E-Mail; call cam @ AOL.com



...from the ground up

Whether your expertise is Broadcast ENG, EFP or Corporate production, Miller's extensive range of 36 custom Camera Support Systems are designed to meet the specific needs of the most demanding camera operators.

Using the latest camera support technology - ***multi-step leakproof fluid drag control, fully variable counterbalance systems, torque-limited leg clamps*** - and materials such as ***robust die-cast bodies, carbon fibre and hard-anodised alloy***, Miller Camera Support Systems deliver the ultimate in quality and choice for all your support needs.

Miller - Designed for the world's most challenging conditions

Miller Fluid Heads (USA) Inc. Tel: (201) 857 8300, Fax: (201) 857 8188
Miller Fluid Heads (Australia) Tel: +61 2 439 6377, Fax: +61 2 438 2819

American Cinematographer
March 1996 Vol. 77, No. 3

Stephen Pizzello
Executive Editor

Martha Winterhalter
Art Director

David E. Williams
Associate Editor

Marji Rhea
Assistant Editor

Frank Beacham
Digital Technology/Video

Brooke Comer
East Coast

Mary Hardesty
Commercials

Debra Kaufman
Postproduction

Ron Magid
Special Effects

Jean Oppenheimer
Television

George Turner
Historicals

Angie Gollmann
Advertising Sales Director

Michael Trerotoli
East Coast & Midwest Advertising Sales

Sally Hong
Classified Advertising

Patricia Armacost
Events Coordinator

Saul Molina
Circulation Director

Leonardo Rodriguez
Controller

Publications Advisory Committee

Steven B. Poster, *Chairman*

James Bagdonas, John Bailey, Russell Carpenter, Curtis Clark, Dean Cundey, Allen Daviau, Roger Deakins, Bert Dunk, Ron Garcia, James Glennon, Robbie Greenberg, John Hora, Johnny Jensen, Mikael Salomon, Sandi Sissel, Robert Stevens, John Toll, Michael Watkins, Kenneth Zunder

American **Cinematographer** (ISSN 0002-7928) established 1920 in 76th year of publication is published monthly in Hollywood by ASC Holding Corp., 1782 N. Orange Dr., Hollywood, CA 90028, U.S.A., 1-800-448-0145, 213-969-4333, Fax 213-876-4973. **Subscriptions:** U.S. $35; Canada/Mexico $50; all other foreign countries $60 a year (remit international Money Order or other exchange payable in U.S. $). **Advertising:** Rate card upon request from Hollywood Office. For **East Coast & Midwest sales (203) 761-9804, FAX (203) 761-0090, 387 Danbury Rd., Wilton, CT 06897.**

Copyright 1996 ASC Holding Corp.

Second-class postage paid at Los Angeles, CA and at additional mailing offices. (All rights reserved.) Printed in the USA. **POSTMASTER:** Send address change to American Cinematographer Magazine, P.O. Box 2230, Hollywood, CA 90078.

experience

THE DOMINO EFFECT

as seen in:

CUTTHROAT ISLAND
Carolco
Cinema Research Corporation/ Digital Rezolution

GOLDENEYE
UA/Eon Productions
Magic Camera
Title sequence: Limelight Productions
FrameStore

OUTBREAK
Warner Bros
OCS/Freeze Frame/Pixel Magic

TUSKEGEE AIRMEN
HBO
OCS/Freeze Frame/Pixel Magic

HAUNTED
Double A Pictures/American Zoetrope for Lumiere
FrameStore

JUDGE DREDD
Buena Vista/Cinergi Pictures
Cinema Research Corporation/ Digital Rezolution

BATMAN FOREVER
Warner Bros
OCS/Freeze Frame/Pixel Magic

MIGHTY MORPHIN POWER RANGERS
20th Century Fox/Saban Entertainment/Toei Company Productions
Digital Magic Company
OCS/Freeze Frame/Pixel Magic

THE UMBRELLA STORY
Golden Centro Pictures
Centro Digital Pictures

FIRST KNIGHT
Columbia/A. Zucker Bros
Cinema Research Corporation/ Digital Rezolution

HELLRAISER IV
Miramax
Cinema Research Corporation/ Digital Rezolution

WATERWORLD
UIP/Universal
OCS/Freeze Frame/Pixel Magic

coming soon:

MUPPET TREASURE ISLAND
Walt Disney Pictures
Jim Henson Productions
Magic Camera

SEVEN SERVANTS
Das Werk
Das Werk

Call our 24 hour Domino Hotline now!
1 800 218 0051 Ext.332

Quantel Inc., 85 Old Kings Highway North
Darien, CT 06820
Tel: (203) 656 3100 Fax: (203) 656 3459

QUANTEL

IF YOU WANT TO FILM IN CHILE, CALL US...

ROOS FILM

Mountains, Deserts, Valleys,
Beaches, Cities, Ports,
Skiing, Lakes, Rivers,
Forests...
and all the equipment and
installation you will need

...WE HAVE IT ALL

ROOS FILM S.A. Ricardo Matte Pérez 0216 Providencia, Santiago, CHILE
Contact J.J. Harting / Héctor Porras / Martín Rodríguez
Phone: 56-2-341 1188 Fax: 56-2-341 1199

PANTHER®
1996 – Time for a higher Standard
Go for it
• Now, 24 different Crane Versions in the new, paneled box design. e.g. Crane Version 9 with a Platformheight of 27" for two men
• The Super Panther III Dolly with updated digital electronics, Mains power unit for 24 V or 48 V, snap-on batteries and combi brakes now lifts the new 2-man ridable Super Jib II with an extendable Platform. If space is restricted, the rear arm can be taken off.
PANTHER®
Panther Sales
Grünwalder Weg 28 c
82041 Oberhaching/Munich
Germany
Phone +49 / 89 / 6 13 10 07
Fax +49 / 89 / 6 13 10 00
Shotmaker
DOLLIES & CRANES, INC.
Shotmaker
28145 Avenue Crocker
Valencia, CA 91355
Tel. (8 05) 2 57-14 44
Fax (8 05) 2 57-61 97

American Society of Cinematographers

The American Society of Cinematographers is not a labor union or a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as directors of photography and have demonstrated outstanding ability. ASC membership has become one of the highest honors that can be bestowed upon a professional cinematographer — a mark of prestige and excellence.

Officers

Victor J. Kemper
President

Steven B. Poster
Vice President

Owen Roizman
Vice President

Robert Primes
Vice President

Howard A. Anderson, Jr.
Treasurer

John Bailey
Secretary

Richard C. Glouner
Sergeant-at-Arms

Members of the Board

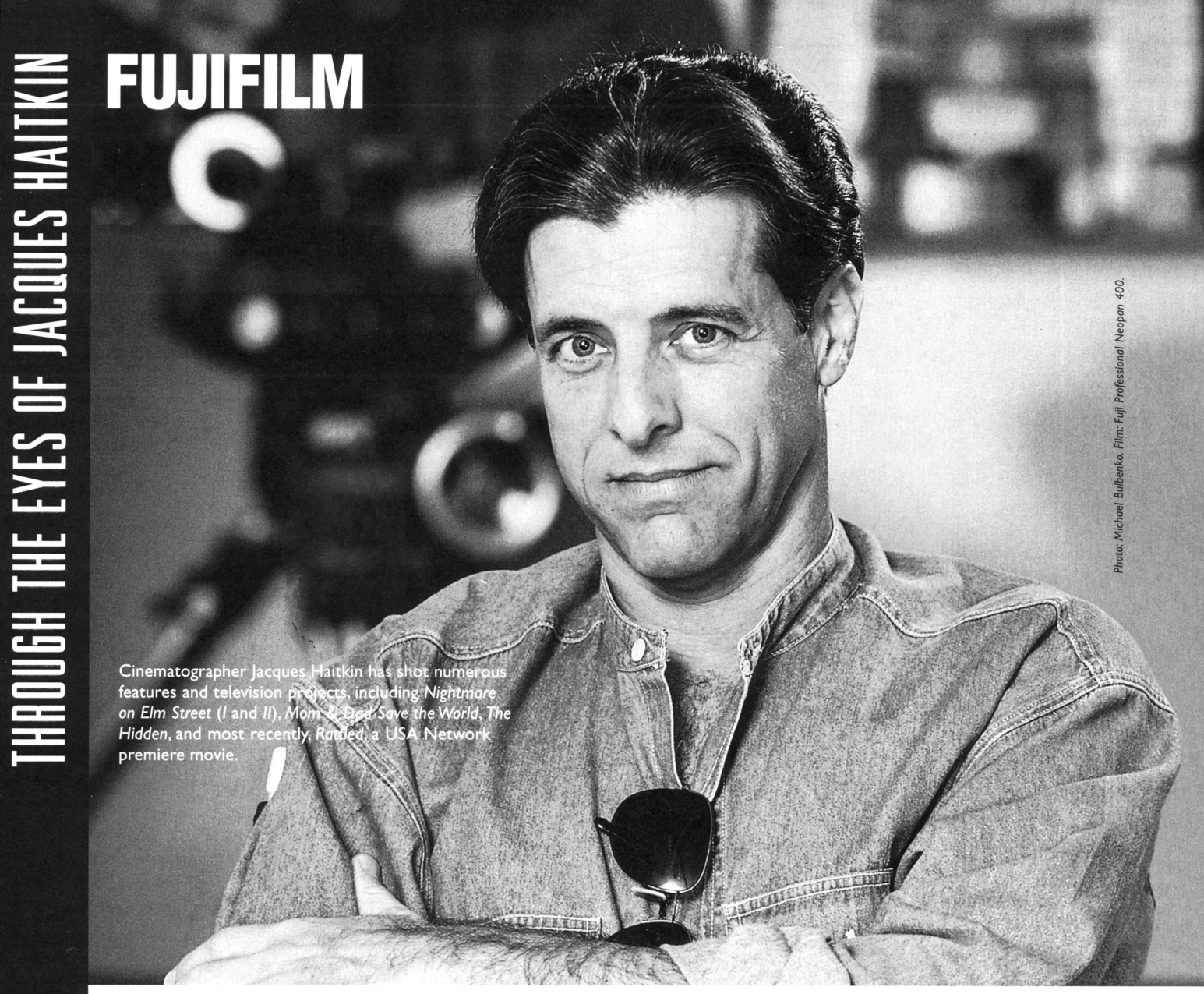
Howard A. Anderson, Jr.
John Bailey
Stephen H. Burum
Stanley Cortez
Dean R. Cundey
Allen Daviau
Linwood G. Dunn
Richard C. Glouner
Victor J. Kemper
Laszlo Kovacs
Steven B. Poster
Robert Primes
Owen Roizman
John Toll
Vilmos Zsigmond

Alternates

George Spiro Dibie
Caleb Deschanel
Gerald Perry Finnerman
John C. Hora
Mikael Salomon

Museum Curator

Kemp Niver


FUJIFILM
THROUGH THE EYES OF JACQUES HAITKIN
Cinematographer Jacques Haitkin has shot numerous features and television projects, including *Nightmare on Elm Street* (I and II), *Mom & Dad Save the World*, *The Hidden*, and most recently, *Rattled*, a USA Network premiere movie.
Photo: Michael Bulbenko. Film: Fuji Professional Neopan 400.

WHAT FILM KEEPS JACQUES HAITKIN FROM FEELING *RATTLED*?

"The ultimate aim for any film stock is to render an image the way the eye sees it. Fuji's Super-F Series comes closest to achieving that goal.

"For *Rattled*, we shot with live diamondbacks. When the snakes were ready, we had to shoot—in some cases with no time for lighting at all. I counted on the Fuji to hold detail in shadows and highlights, and had some excellent results in available light.

"I prefer not to use contrast-reducing filters or excess fill to compensate for exaggerated contrast in film stock. With Super-F 250D, I didn't need to.

"Another benefit of Super-F's remarkable latitude is ease in matching with second unit—which often uses little or no lighting. When first and second unit footage were intercut, you couldn't tell them apart."

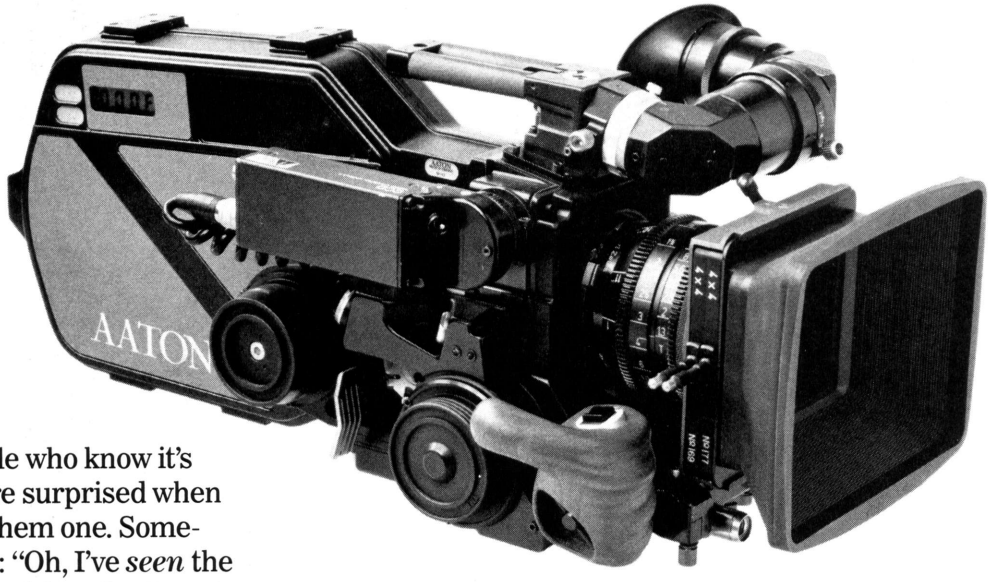
When you see *Rattled*, you're seeing FUJIFILM.

FUJIFILM

FUJI PROFESSIONAL MOTION PICTURE PRODUCTS
NEGATIVE • INTERMEDIATE • POSITIVE PRINT STOCK

Sales & Marketing: 800/326-0800, Extensions 4303 & 4304
CompuServe → GO FUJI
1141 North Highland Avenue, Hollywood, CA 90038

At Clairmont: the latest model of the AATON-35



Even people who know it's small are surprised when we first show them one. Sometimes they say: "Oh, I've *seen* the Sixteen, it's the Thirty-five I want to see now." We say: "This is the Thirty-five." They say: "*That's* the Thirty-five?"

16mm style

DP Tom Sigel used to own two AATON 16mm LTRs. "I put millions of feet through them, shooting documentaries and television," he says. "They balanced perfectly on my shoulder; and this AATON-35 is the same. I'm using it for features, but I'm shooting the same way. Once you're tuned in, you barely have to hold onto it."

No headroom

DP Chuck Minsky used an AATON-35 to shoot dialogue for an MCI commercial inside a New York taxi. "We were hoping for a Checker cab," he says, "But this was a regular sedan, with no headroom. We drove back and forth all day across the Brooklyn Bridge, with two actors in the back seat and me in the front seat, hand-holding."

No soundman

DP Petr Litomisky recently shot a commercial for Seafirst Bank in a Piper over Seattle. Its four seats were occupied by the actor/pilot, the director, an ad agency man (feeding the actor lines) and Mr. Litomisky with an AATON-35. "No room for a soundman," he says, "So we put a Nagra behind the seats and used timecode."

Getting better

"I began shooting with AATON-35s about five years ago," says Mr. Litomisky. "Now Clairmont has some; and theirs are noticeably quieter. And I've had no reliability problems with theirs. Even their *magazines* are quieter; I don't know why."

2 million feet

1st AC Michael FitzMaurice worked at Pytka for about ten years, mostly as a 2nd AC. "They bought an AATON-35 in 1991," he says. "Since then, Pytka must have run 2 million feet through it, half of which I loaded myself. The clip-on magazine has a reputation for being difficult to load, but I don't think so."

Dependable

"From 1991 to mid-1994, I wouldn't have said the AATON-35 was dependable. Now it is," says Mr. FitzMaurice. "From the beginning, we were saying: *As soon as Clairmont gets ahold of them, these cameras are going to become magic*. And now they have."

The modifications

With AATON's expert cooperation, we made several changes to one of our first two cameras. To decrease friction, we milled additional channels in the gate. We also reduced the contact area on our magazine pressure pads. We increased the pad's spring tension and we narrowed the film channel's depth. Our claw was set for deeper penetration

and increased spring tension. We suggested that the factory might increase the stroke length; and they did so.

All cameras at Clairmont have all the newest features

All these improvements are now built into all the AATON-35s at Clairmont, together with a few more of our own modifications. All our cameras are the latest version of the 35-III. See the new factory features listed below.

Carry-on

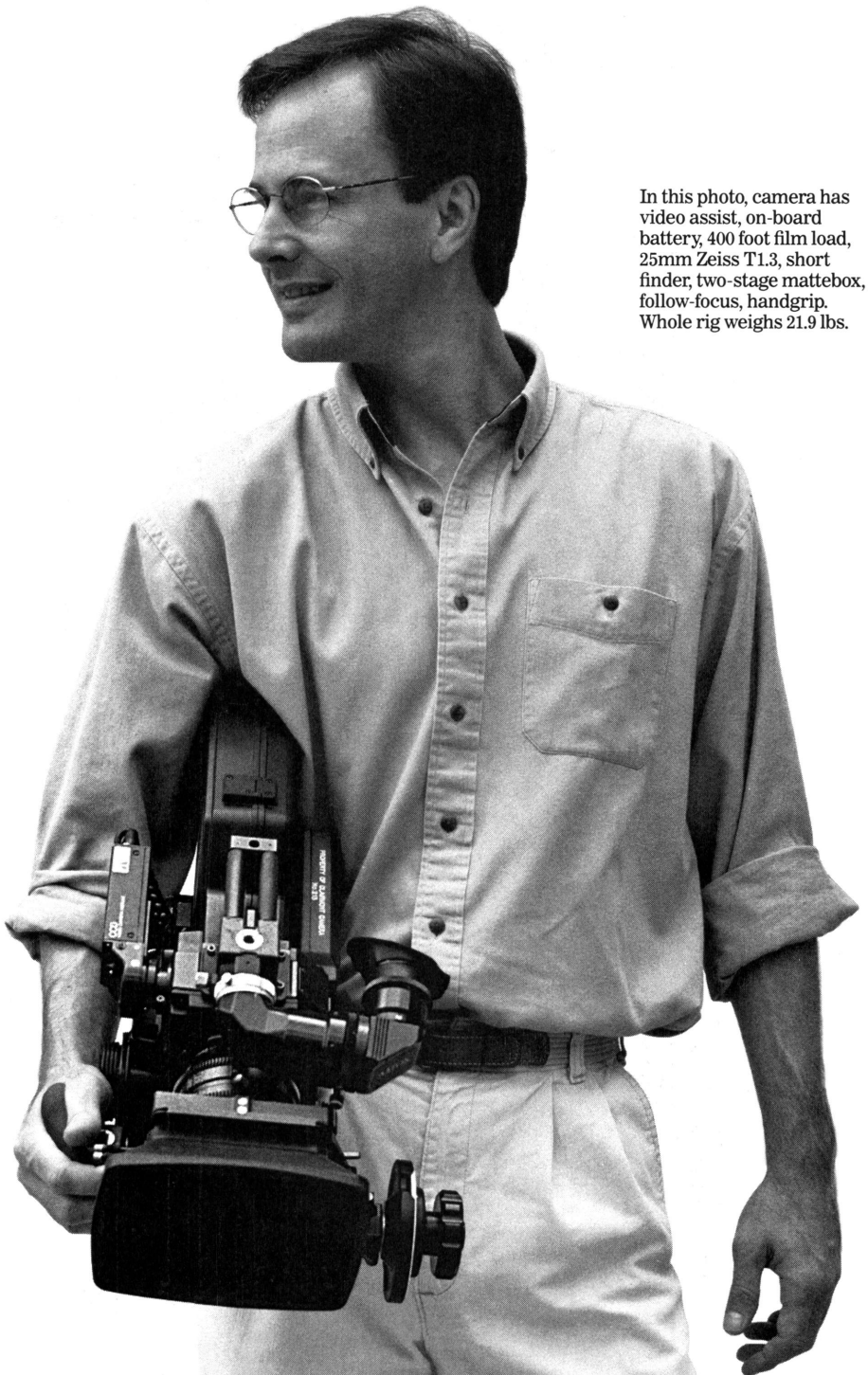
"We've gone into places where nobody knew we were filming, where a slate would have blown our cover," says Michael Fitz-Maurice. "I've walked in with the camera in a shoulder-bag designed for a pro Betacam camcorder. Nobody gives it a second look. The whole camera fits into it, with lens and magazine in place. I regularly walk onto airplanes with that bag on my shoulder, as carry-on baggage."

Camera smuggling

"I took the Pytka AATON-35 as carry-on to Brazil and back to the U.S.A. *twice*," says Mr. Fitz-Maurice. "We were shooting Nike commercials to be aired at the Soccer World Cup and we needed shots of the Brazilian players. On both shoots, I carried that camera into Brazil and out again without any of the authorities being aware of it."

The new factory-installed features:

A movement heater that reduces low-temperature power drain; an optional eyepiece heater; easier loop-length forming; a high-def, flicker-free, color video assist with time-code both in the video blanking and visible on the monitor; a user-adjustable shutter, to sync at 24fps with 60Hz and 50Hz lighting and with video monitors; adjustable pitch, for quieter running.



In this photo, camera has video assist, on-board battery, 400 foot film load, 25mm Zeiss T1.3, short finder, two-stage mattebox, follow-focus, handgrip. Whole rig weighs 21.9 lbs.

CLAIRMONT CAMERA

North Hollywood, California and Vancouver, British Columbia. (818) 761-4440

QUICKPOLE BOOMS

Very stiff carbon fibre
All metal screwlock

QUICKPOLE JUMBO

The answer to classical, Organ music, and film location recording.

QP 5190 9 m Long
QP 6200 11 m Long

Fits standard Manfrotto stand.
Angle adapter, for horizontal or vertical positions.

Special lightweight Ambient tripod.

STANDARD BOOMS

For Film/TV. low handling noise. Easy action. Good for heavy mikes.

QP 460 2.0 m
QP 470 2.5 m
QP 480 3.2 m
QP 4140 5.2 m

Boom extensions as fifth segment.
Fits Manfrotto stand.
Custom sizes on request.

QUICKPOLE LIGHT

Light weight booms for ENG

THE FLOATER

Acoustic suspension

Prevents boom or floor noise reaching sensitive mike assemblies.

Standard 3/8" thread or Rycote flange adapter. 4 hardness levels for mikes up to 1.5 Kilos

Indispensible when booming with MS Stereo Mikes.

Call us for info and dealer list

AMBIENT RECORDING

Konradinstrasse 3
81543 Muenchen · Germany
Tel. 00 49/89/6 51 85 35
Fax 00 49/89/6 51 85 58

Letters

More Support for the Shot

I am in perfect agreement with John Bailey, ASC's comments in January's Filmmakers' Forum. Though I am not as familiar with foreign films as he is, mentioning the titles of many B as well as A pre-1970 films immediately calls to my mind great images seared into it during countless hours before movie screens.

It may seem an heretical statement for a film editor, but too many of today's directors seem to equate "visual excitement" with montage, composed of quick shots often made from multiple cameras and used even for casual dialogue scenes, which compromises composition, camera movement, and staging, as well as lighting.

Such staccato visuals may prevent the eyes from getting bored when looking at a low-resolution medium like video, but the type of shots described by Mr. Bailey can excite and enchant the eye, even when viewing a high-quality Super 8 print on a large screen. Those who cite MTV as a standard to follow forget that there are physical and physiological differences between viewing the two mediums.

And incidentally, the work of many editors who have become directors is distinguished by outstanding cinematography — most notably the films of Robert Wise, David Lean, Mark Robson, John Sturges, Edward Dmytryk, and, more recently, Martin Scorsese and Joe Dante. And as a director, John Bailey also practices what he preaches, as his *China Moon* (1994), photographed by Willy Kurant, will attest.

— Rick Mitchell
Los Angeles

Storyboard Artist Heard From

I have a bone to pick with *AC* on behalf of the storyboard artists out there: how come you never print our names beside our work? For example, in the December 1995 article on *GoldenEye*, *AC* mentions the importance of storyboards in the filming process several times and even prints four pages of the same artist's work, but then ignores that artist's contribution to the film by failing to print his or her name in the captions.

We are not just nerds with pencils, furiously drawing what the director dictates. We have to look into their eyes and comprehend what they are seeing in their minds. It's an interactive process where the director sometimes goes with an idea that the storyboarder thinks up. It's an exciting job to pre-visualize a film with a director or cinematographer (or an effects supervisor or stunt coordinator). The storyboard artist must generate one of the tools with which the whole crew can focus on a visual goal.

So the next time *American Cinematographer* prints a frame or a page of storyboards, just for my curiosity, please name the artist who drew it.

I thank you in advance on behalf of all storyboard artists.

— Andy Friend
Los Angeles

The neglected GoldenEye *storyboard artists were Martin Asbury and Syd Cain.*

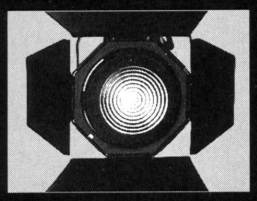
Gaffer Piece Applauded

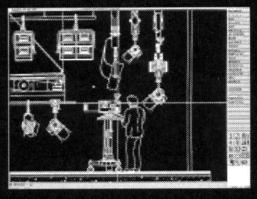
Regarding Chris Probst's "Wranglers of Light," *AC* November 1995: I have been reading about film for over fifty years — at last, a good article on the gaffer.

Now how about one on the best boy?

— Philip G. Pfister,
Local 780, Chicago
Motion Picture Lab
Technician, Retired

Please send any comments or suggestions to **Letters to the Editor, American Cinematographer, P.O. Box 2230, Hollywood, CA 90078.** Or reach us online at **ASCMAG@aol.com.**





We design your **studio ceiling**, the complete **lighting equipment**, **suspension systems** (motor-driven or manual operation) as well as **positioning** and control systems – all with Sachtler products! Why don't you write us or give us a call? We are happy to provide you with detailed **information**.

Headquarters: Sachtler AG, Germany, Gutenbergstraße 5, 85716 Unterschleissheim bei München, Telephone (089)32158200, Fax (089)32158227

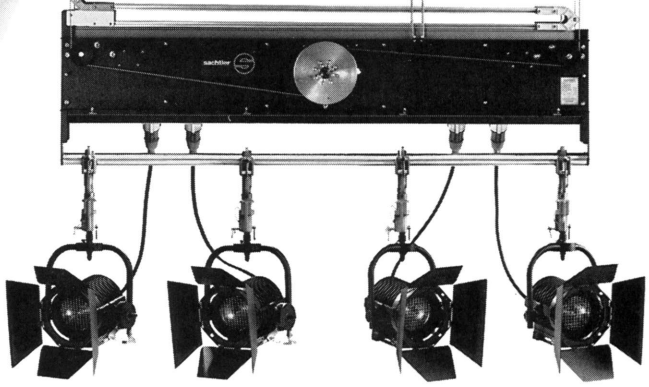
Eastern Europe: Sachtler Vertriebsgesellschaft m.b.H., Germany, Segelfliegerdamm 67, 12487 Berlin, Telephone (0 30) 6 36 43 11, Fax (0 30) 6 36 34 66

U.S.A.: sachtler® corporation of America, New York office: 55, North Main Street, Freeport, N.Y. 11520, Phone (516) 8 67-49 00, Fax (516) 6 23-68 44

アミック ザハトラー株式会社

Japan: Amic Sachtler Corp.

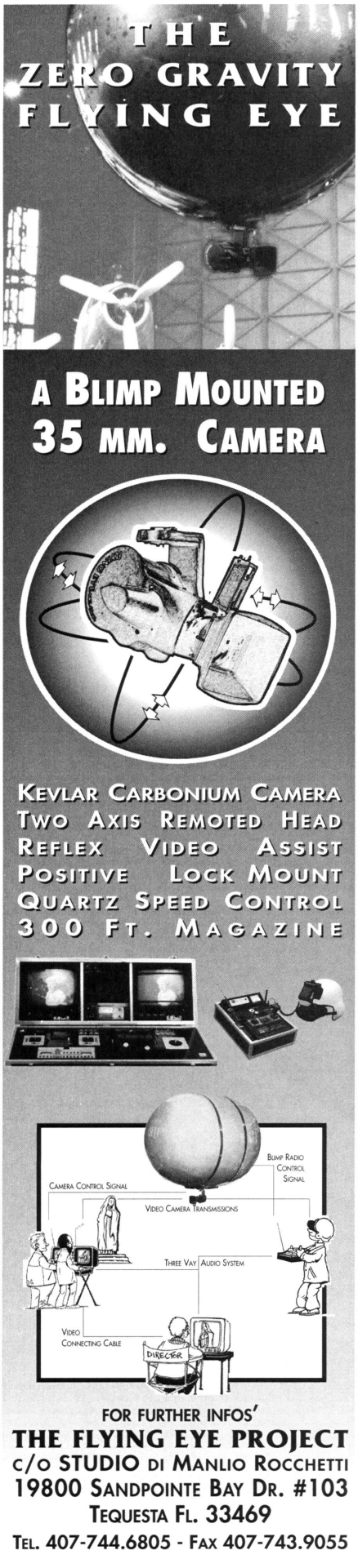
東京都世田谷区三軒茶屋
1－2－21　〒154
電話 (03)3413－1212
Fax (03)3413-0888



Lighting and Studio Technology

sachtler

Support & Lighting



Personal Video Comes of Age

by Frank Beacham

Has Betacam — so long the prince of video formats — finally met its match? That's the buzz among those who have used the new low-cost digital camcorders from Sony and Panasonic. DVC (for digital video cassette) has caught the imagination of videomakers who think the era of expensive professional field recording is soon to be history. The new three-chip DVC camcorders weigh less than three pounds and cost under $4,500, yet rival the image and sound performance of the analog Betacam SP format.

Sony was first into the market with its new DCR-VX1000 Digital Handycam, a camcorder targeted to consumers and semi-professionals. Panasonic followed with its AG-EZ1 DVCam for professionals seeking a low-cost, highly-portable documentary camcorder. Both feature three ⅓-inch CCDs, 10:1 mechanical zooms, image stabilization, 180,000-pixel color viewfinders and photo modes to record still images.

And, perhaps just as noteworthy, Sony's adoption of the IEEE 1394 serial bus technology — known as FireWire — will allow its DVC video equipment to be easily connected to a stock Macintosh or Windows PC for inexpensive desktop video postproduction.

Panasonic has limited its EZ1 camcorder to Y/C and composite analog video outputs. However, Ralph Biesemeyer, Panasonic's manager for DVC products, notes that his company is among the consortium of electronic and computer companies supporting the IEEE 1394 standard, and that he expects a FireWire port on future DVC models.

So far Sony has kept its DVC products entirely in the consumer division, though there is speculation the manufacturer will introduce a professional line of DVC equipment at NAB in April. Panasonic, on the other hand, announced last year a more rugged version of the format it calls DVCPRO.

Panasonic does not think DVC in its consumer form is robust enough for daily professional use. DVCPRO seeks to toughen the format with a change in track pitch to better accommodate multiple insert edits. It also offers an improved off-tape error rate, a "cue" audio track and a control track for fast servo lock-up and frame accurate editing.

Currently, Panasonic's new AJ-D750 DVCPRO studio editing VCR is the only way a standard DVC cassette can be used for image acquisition in a professional digital postproduction environment. "We use a back-loading, passive adapter to take the DVC minicassette and allow it to be placed in the DVCPRO player," explains Biesemeyer. "You can edit from the DVC tape but not onto it. You can even slow-mo a DVC recording."

Use of the DVC format, as opposed to the DVCPRO format, makes little difference in video image quality, he says.

Since neither DVCPRO nor FireWire was ready when the first DVC camcorders went on sale late last year, two of the first productions to use the new format were forced to transfer the camera masters to Betacam SP for editing. Susanne Szabo Rostock, a New York City-based director and editor of numerous award-winning documentaries, edited some footage shot on the Sony DVC camcorder for a documentary project called *Roam Sweet Home*. Her verdict: the new format is far superior to Hi8 and is equivalent in video quality to Betacam SP.

"There was no dropout, which was a major improvement over the Hi8 format," she remarks.

The lack of dropout was also cited by Matthew Heineman, a New York City-based producer/director who used two Sony DVC camcorders on a recent production for IBM and Eric Solstein Productions in China.

"It was fantastic," enthuses Heineman, who mounted a VX1000 on a

FINALLY,

EDITING PRODUCTS THAT DO EVERYTHING YOU'D EXPECT. AT PRICES YOU DON'T EXPECT.

D-Vision Pro, the intuitive, easy to use non-linear editor, with thousands of users worldwide is known for full-featured editing and affordable pricing. Pro includes: Flex and Evertz edge code reading, negative cut list output, up to 100 hours of storage, perfect audio sync of 6 independent audio channels... And is upgradeable to D-Vision's revolutionary new D-Vision FilmCUT™. Buy Pro now to ease your way into digital non-linear editing and take advantage of preferential upgrade pricing.

D VISION®

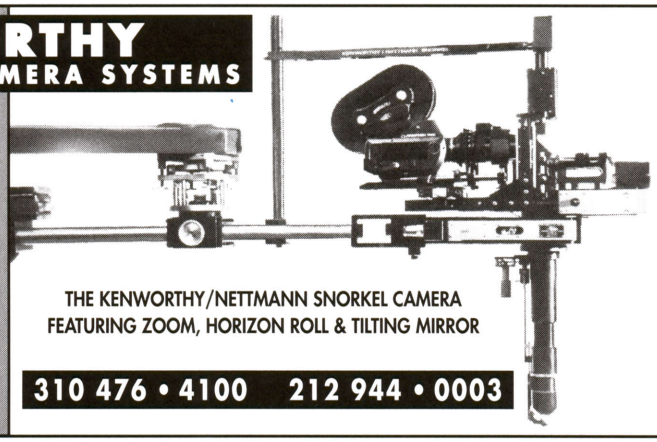
D-Vision Systems, Inc.
Making Digital Media Work For You.

Call for details.
1-800-8DVISION (1-800-838-4746)
or outside the U.S.:+1-312-714-1400
For the Professional Partner Nearest You.

See us at NAB booth #8823

KENWORTHY
SNORKEL CAMERA SYSTEMS

HOFFA
FALLING DOWN
DEMOLITION MAN
NORTH
TALES FROM THE HOOD
BATMAN FOREVER
COMMERCIALS
MUSIC VIDEOS



THE KENWORTHY/NETTMANN SNORKEL CAMERA
FEATURING ZOOM, HORIZON ROLL & TILTING MIRROR

310 476 • 4100 212 944 • 0003

Mole-Richardson Co.

At Mole-Richardson Company, we have a commitment to excellence. Not only in our products, but in our service. As a recognized leader of lighting in the entertainment industry, we would like to introduce our newly expanded expendable store, "STUDIO DEPOT" EXPENDABLES, providing all your grip, camera, lighting and electrical needs. Access our home page on the internet for Mole-Richardson® Lighting, Mole-Richardson® Rentals, Studio Depot™ and Moletown,® and experience our growth on the World-Wide Web.

http://www.mole.com

Manufacturing

Sales & Rentals

Studio Depot

Moletown

937 N. Sycamore Ave., Hollywood, CA 90038-2384 Tel: 213•851•0111 Fax: 213•851•5593 E-mail: info@mole.com

Steadicam Jr. He also praises its performance in the notoriously dirty air of Beijing. "It didn't affect the video at all," he says. "The one real downside is that the image is electronically blown up with the digital zoom. You get pixelization [and lower resolution.] And there's a glitch in the image when the zoom moves from mechanical to digital."

Heineman says he does not consider video footage shot with the digital zoom to be of acceptable quality for most professional applications. Other minor criticisms were that the color viewfinder covered slightly less than the full picture area and that under certain conditions when switching from manual to automatic modes the camera controls locked up. However, he concludes that the overall experience was a good one. "This equipment allowed us to get into places you can't get to with professional equipment — for example, the Forbidden City," he says. "The DVC format really blurs the definition of what is professional and what isn't."

The DVC and DVCPRO formats offer more than 500 lines of horizontal resolution, record 4:1:1 component digital video and use 5:1 intra-frame compression. The 5.75 MHz bandwidth signal has a signal-to-noise ratio of 54 dB. Neither of the new DVC recorders has analog inputs and no full-size DVC VCRs are yet available, pending resolution of copy protection issues regarding home recording.

The DVC standard allows for PCM digital audio in either a 16-bit mode for left-right stereo or a 12-bit mode for two stereo channels.

DVC camcorders from both manufacturers record on standardized Mini DV 30 and 60-minute length 6.35mm digital video cassettes, which are ½ the size of a standard VHS cassette. Each 60-minute tape can store up to 11 gigabytes of information, the storage capacity of 7,500 floppy disks.

Frank Beacham is a New York-based writer and producer. Visit his Internet web site at: http://www.beacham.com. Mail: 163 Amsterdam Ave. #361, New York, NY 10023. E-mail: beacham@radiomail.net.

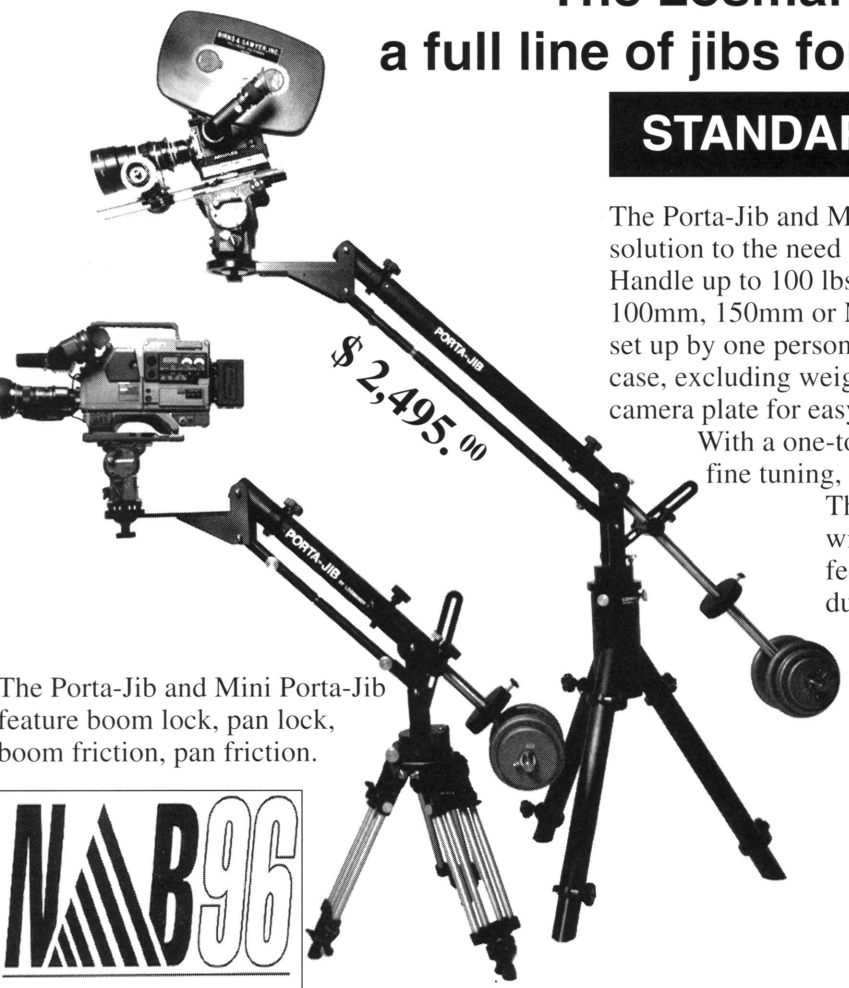
The Losmandy Porta-Jibs™: a full line of jibs for your production needs.

STANDARD & MINI PORTA-JIB™

The Porta-Jib and Mini Porta-Jib offer an economical and practical solution to the need for smooth camera moves in a portable package. Handle up to 100 lbs of camera and fluid head weight. Interchangeable 100mm, 150mm or Mitchell camera plate, underslung capable. Can be set up by one person in less than 5 minutes and pack in one carrying case, excluding weights. Bubble levels are located on panhead and camera plate for easy levelling.

With a one-to one weight ratio and the sliding counter-weight for fine tuning, the arm can be balanced in a matter of seconds.

The modular design permits 4 different configurations with a front arm length ranging from 3 feet to 8-1/2 feet. The Porta-jib and Mini Porta-Jib can receive a dual arm kit and become the Dual Porta-Jib.



$ 2,495.00

The Porta-Jib and Mini Porta-Jib feature boom lock, pan lock, boom friction, pan friction.

NAB96

April 15-18 1996.
Visit us at the Sands
Booth S2271

DUAL PORTA-JIB™

A dual arm can be added to the Porta-Jib or Mini Porta-Jib to make a Dual Porta-Jib. The dual arm eliminates pan and boom arcs, permits straight in and out moves. When combined with a dolly move, the camera glides effortlessly in any direction, similar to moves of expensive body-mount systems. Dual Porta-Jib assembles and balances in less than 15 minutes and fits into two carrying cases (excluding weights).

Dual Porta-Jib Kit:
$ 2,950.00

PORTA-JIB™ TRAVELLER

Traveller:
$ 2,195.00

Built for crews who want to travel light, the Porta-Jib Traveller arm and counterweight shaft fold from a total over all length of 116" down to an amazing 31" and Traveller weighs only 35 lbs. The arm length is variable and can be adjusted from 38.5" to 55.5". The vertical boom range varies from 41" to 68". The Traveller will fit any 100mm, 150mm or Vinten top tripods. It accepts any 100mm bowl tripod head. Maximum front payload is 40 lbs. Because of its unique ingenious design, setting up the Traveller is very easy. No tools are required. Setting-up means unfolding rather than assembling.

BIRNS & SAWYER HOLLYWOOD

BIRNS & SAWYER, INC

1026 N. Highland Ave. Hollywood, CA. 90038
(213) 466-8211 Fax: (213) 466-7049

Production Slate

compiled by Marji Rhea

Eastman Product Grants

The Eastman Kodak Company has awarded Eastman product grants to the School of Cinema-Television at the University of Southern California, the American Film Institute, and the School of Theater, Film & Television at UCLA. Grants take the form of Eastman motion picture film, and are extended to institutions in recognition of overall program quality.

The Eastman Product Grant is part of the Kodak Worldwide Student Program, whose educational initiatives include the Eastman Scholarship Program, the Eastman Educational Allowance Program, the Eastman Educational Training Modules, a VIP student News Service, and Eastman's *Images* newsletter. The program also supports workshops in cinematography, an Educators' Symposium, the Kodak Visiting Artists Program, the Academy of Motion Picture Arts and Sciences Student Academy Awards Compilation Film, the Academy of Television Arts and Sciences College Awards, and several special events.

The Student Program is guided by three Motion Picture Educational Advisory Councils serving North America, Europe and the Asia-Pacific region. The councils are made up of deans, chairs and department heads from leading film schools in each region.

Eastman Kodak, (213) 464-6131.

Primes Speaks for ASC

Robert Primes, ASC, speaking at the recent Inter BEE International Broadcasting Conference in Tokyo, reiterated the American Society of Cinematographers' position calling for an advanced television system which more accurately represents the artistic intentions of the creative community and is compatible with the requirements for a National Information Infrastructure or information superhighway.

Primes explained that the ASC has endorsed a 2:1 aspect ratio for advanced television systems because "it is an elegant and beautiful frame for storytelling. Discussions with leading cinematographers have convinced us that the artists composing the shots wish to work in this format. The width-to-height dimensions of a 2:1 screen will make it possible to present all films in their native aspect ratios with a digitally-based advanced TV system."

The FCC is currently considering a proposal for an advanced television system that calls for a 1.78:1 aspect ratio. The latter would require either letterboxing or panning and scanning thousands of feature films currently in libraries. Some 30 percent of new features are produced in either anamorphic or Super 35 widescreen formats. Primes said that this process "diminishes the art and cheats the audience." We wouldn't dream of cropping paintings hanging in a museum. A film is much more than a play. The scale of things in the frame and their relationships to each other often carry far more importance than the words that are spoken. This is part of the language of film.

"The average feature is made up of around 1,200 individual shots," Primes explained. "Every single shot has been meticulously composed by the cinematographer and director to have the maximum impact and balance, and to convey the elements of the story in the proper perspective."

The ASC proposal also calls for progressive, rather than interlaced, scanning which is capable of at least 72 hertz.

Spirit Award Nominees

The nominations for the 11th annual Independent Spirit Awards were announced in January at an Independent Feature Project/West reception. The awards will be presented at a tent-covered celebration at the beach in Santa Monica, CA on March 23.

This year's nominations encompass new rules for eligibility to allow features which have been shown at a commercial theater during the 1995 calendar year, or have played at the New York, Seattle, Sundance, Telluride, Toronto or New Directors/New Films festivals, to be eligible for competition in all categories.

The nominees for Best Cinematography, Feature, First Feature, Director, and Foreign Film are listed below. *AC* will be covering the awards festivities and the winners in an upcoming issue.

Best Cinematography
- Elliot Davis, *The Underneath*
- Jim DeNault, *Nadja*
- Declan Quinn, *Leaving Las Vegas*
- Tom Richmond, *Little Odessa*
- Newton Thomas Sigel, *The Usual Suspects*

Best Feature (given to the producer)
- *The Addiction*, Denis Hann, Fernando Sulichin
- *Leaving Las Vegas*, Lila Cazes, Annie Stewart
- *Living in Oblivion*, Michael Griffiths, Marcus Viscidi
- *Safe*, Christine Vachon, Lauren Zalaznick
- *The Secret of Roan Inish*, Sarah Green, Maggie Renzi

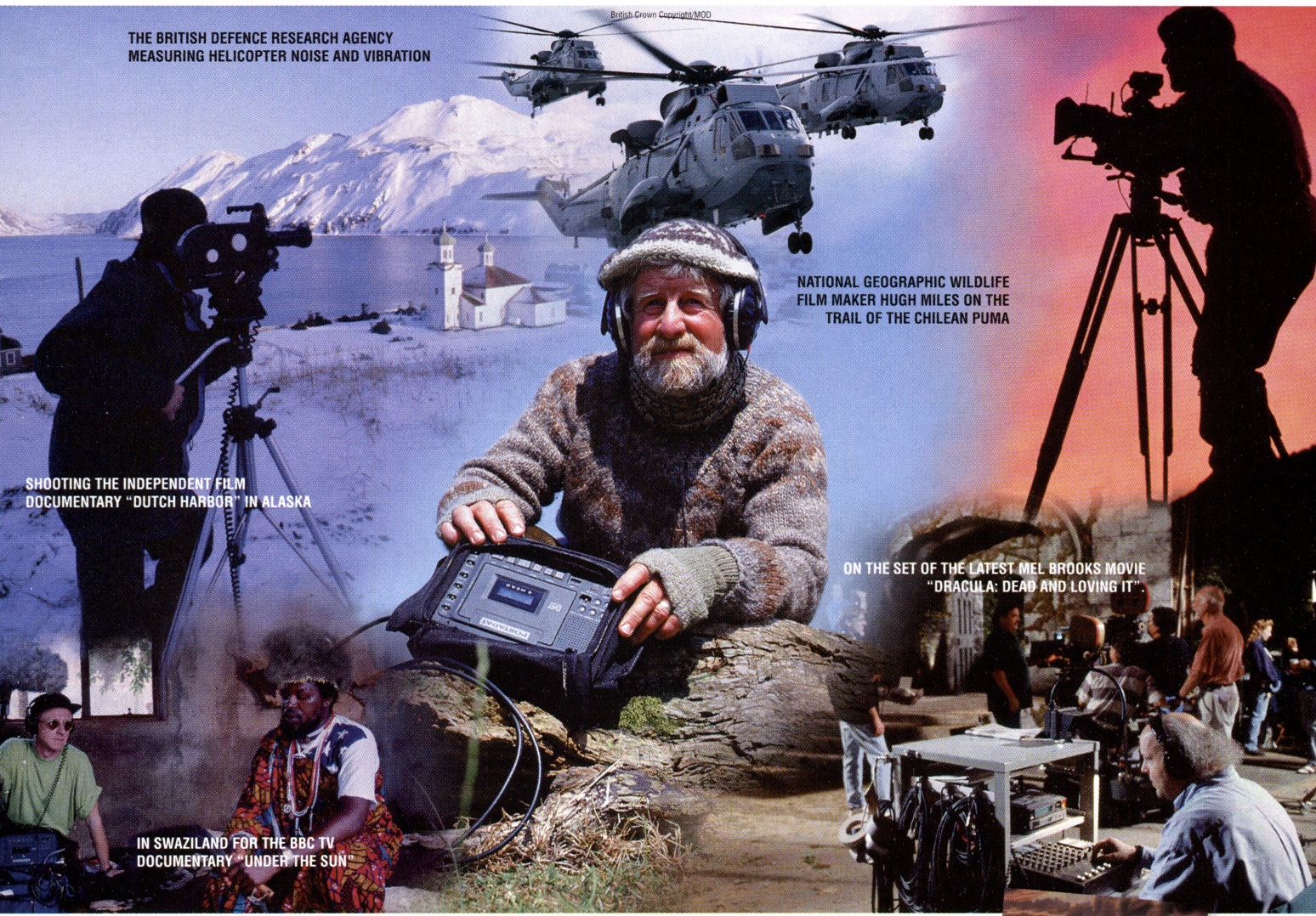
Best First Feature (given to the director)
- *The Brothers McMullen*, Edward Burns
- *Kids*, Larry Clark
- *Little Odessa*, James Gray
- *Picture Bride*, Kayo Hatta
- *River of Grass*, Kelly Reichardt

Best Director
- Michael Almereyda, *Nadja*
- Mike Figgis, *Leaving Las Vegas*
- Ulu Grosbard, *Georgia*
- Todd Haynes, *Safe*
- John Sayles, *The Secret of Roan Inish*

Best Foreign Film (given to the director)
- *Before the Rain*, Milcho Manchevski (Macedonia)
- *The City of Lost Children*, Marc Caro, Jean-Pierre Jeunet (France)
- *Exotica*, Atom Egoyan (Canada)
- *I Am Cuba*, Mikhail Kalatozov (USSR — completed 1964)
- *Through the Olive Trees*, Abbas Kiarostami (Iran)

PORTADAT

SERIOUSLY PROFESSIONAL PORTABLE DAT

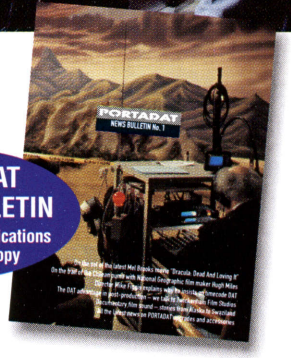

British Crown Copyright/MOD
THE BRITISH DEFENCE RESEARCH AGENCY MEASURING HELICOPTER NOISE AND VIBRATION
NATIONAL GEOGRAPHIC WILDLIFE FILM MAKER HUGH MILES ON THE TRAIL OF THE CHILEAN PUMA
SHOOTING THE INDEPENDENT FILM DOCUMENTARY "DUTCH HARBOR" IN ALASKA
ON THE SET OF THE LATEST MEL BROOKS MOVIE "DRACULA: DEAD AND LOVING IT"
IN SWAZILAND FOR THE BBC TV DOCUMENTARY "UNDER THE SUN"

PORTADAT PDR1000

TIMECODE-EQUIPPED PORTADAT PDR1000TC

Superior sound quality, great handling and all the right features have rapidly established the PORTADAT professional portable DAT recorder as an international industry standard, with thousands of machines already hard at work around the world. Now you can get the full PORTADAT story direct from the professionals in **The PORTADAT News Bulletin** – 16 pages packed full with PORTADAT information, user interviews, accessories, updates and useful hints and tips.
Call HHB Communications today on 207 773 2424 for your free copy.

PORTADAT NEWS BULLETIN
Call HHB Communications for your free copy



HHB

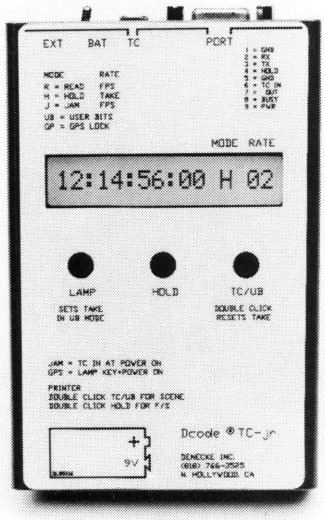
HHB Communications Inc · 43 Deerfield Road, Portland, Maine 04101 1805, USA · Tel: 207 773 2424 · Fax: 207 773 2422 · E-Mail: 75671.3316@compuserve.com
HHB Communications Ltd · 73-75 Scrubs Lane, London NW10 6QU, UK · Tel: 0181 962 5000 · Fax: 0181 962 5050 · E-Mail: sales@hhb.co.uk
Studer Canada Ltd · 1947 Leslie Street, Toronto, Ontario M3B 2M3, Canada · Tel: 416 510 1347 · Fax: 416 510 1294

NEW

from DENECKE, INC.

the

TC-JR



SELF CONTAINED
BATTERY OPERATED
JAMSYNCABLE
TIME CODE READER

$295

PERFECT
for Script Logging

DENECKE, INC.
5417 Cahuenga Blvd. #B
N. Hollywood, CA 91601
(818)766-3525

Each program transmitted would contain a header descriptor which instructs the digital TV set to operate at the appropriate frequency for optimizing the truest representation of the program material. This would eliminate artifacts inherent to the current television system. The descriptor could also be used to eliminate the need for gain, contrast and color controls, because it would automatically adjust the television set to optimize viewing of the program.

The ASC proposals are compatible with specifications for multimedia computers that will drive the NII. During its research the ASC consulted closely with Apple Computers, who have proposed the development of combined advanced television/computer monitors with 2048 lines of resolution, square pixels for better text resolution, and a non-interlaced or progressive frequency of at least 70 hertz.

These specifications, combined in a multimedia computer and advanced TV set, would meet the Clinton administration's goals for an NII which could be used for a wide range of purposes, including health care, education, work at home and electronic mail, in addition to screening movies and other programming.

Safe Film Disposal Plan

More than 10 million pounds of theatrical print films, the equivalent of 250 fully-loaded tractor-trailer trucks, are being diverted from landfills each year in the United States, Canada and Europe through an environmentally safe disposal plan developed by FPC, Inc., a Kodak company.

FPC has maintained a "zero landfill policy" by finding new ways to reuse or properly dispose of theatrical prints. After FPC destroys the image and sound information, it recycles much of the acetate or polyester base to make magnetic striped film for sound postproduction and for editorial leaders. Creating the washbase product involves removing the emulsion from a print, then coating it with magnetic strips.

FPC began offering these magnetic strip products as early as 1963. In addition, FPC markets fullcoat, a magnetic recording film, in both 16mm and 35mm for multi-track sound recording. The company is also expanding into digital recording technologies.

Whatever the company can't reuse in the form of magnetic materials or leaders is chopped and burned in a waste-to-energy program. However, the 10 million pounds FPC is diverting from landfills is only a portion of the total film being discarded: the company estimates that they are disposing with about one-third of all prints made for feature-film release. (A single full-length motion picture can generate more than 25 million feet, or almost 5,000 miles, of film.) FPC maintains three plants — in Hollywood, Mountain City, Tennessee, and Milan — to handle the film, which comes in through its Film Salvage Company division.

FPC, (213) 468-5774.

ShowBiz Expo Trades Hands

Reed Exhibition Companies, one of the world's leading producers of trade shows, including Entertainment Expo and IntermediaWorld, has acquired the ShowBiz Expo series of expositions and conferences. The company will be working with its sister company, Cahners Publishing — which owns *Variety*, *Daily Variety*, *Variety's On-Production* and other entertainment industry publications — to expand the conferences

Reed Exhibition Companies, (203) 840-5484.

Saul Bass Honored

Saul Bass, filmmaker, film title and credit designer and graphic designer, will be honored by the School of Visual Arts in New York City in a Master Series Exhibition at the College's Visual Arts Museum from March 11 to April 5. During his career Bass has worked with such directors as Alfred Hitchcock, Billy Wilder, Otto Preminger, and Martin Scorsese. Some of the earlier of his 40-plus film title credits are *The Man With the Golden Arm*, *Vertigo*, *The Seven Year Itch*, *West Side Story*, and *Anatomy of a Murder*. He also designed the shower sequence in *Psycho*. More recently he has created opening sequences for *GoodFellas*, *Big*, *The War of the Roses*, *Cape Fear*, *The Age of Innocence* and *Casino*. He has also designed trademarks and logos for AT&T, Minolta, United Airlines and the Girl Scouts.

The School of Visual Arts, (212) 679-7350.

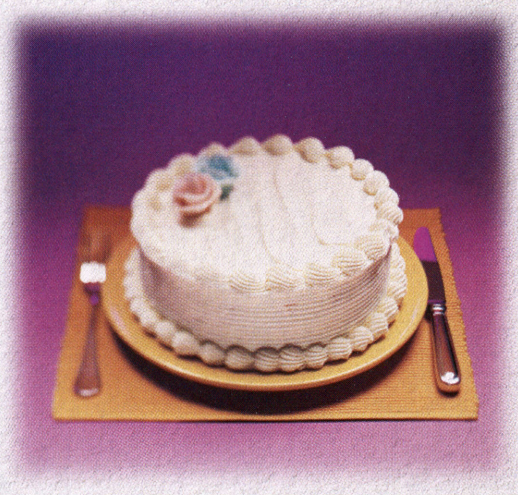
AS YOU MOVE INTO THE DIGITAL FUTURE, WILL THE TECHNOLOGY YOU NEED BE DISK-BASED OR TAPE-BASED?

YES.

Evolution is a process, not a place.

There is no final destination. The goal is always to make the most of changing conditions. Take advantage of emerging opportunities. And get the jump on your competitors. So allow us to suggest a strategy that makes use of the advantages of all the technologies at your command.

The issue – and your ultimate goal – is system flexibility. The flexibility to use any technology that fits the function it performs best by maximizing performance and cost-efficiency for the requirements of the application at hand.



Server gurus may claim that disk technology is the answer to every need. In other words, that one size fits all. But does it?

For immediate access to video clips of relatively short duration, the best storage technology is a hard disk drive. So non-linear, disk-based server systems are indispensable, particularly in multiple editing operations.

But for acquisition, no technology beats tape. The cost is very low. The recording capacity is enormous. Camcorder size, power consumption – in sum – overall system performance is superb. And the convenience is persuasive.

For off-line, long-form, and archival storage, a tape-based system is more cost-efficient: just pennies per megabyte, instead of dollars. The media is removable. The access time is acceptable. And the system configuration is expandable.

And as we move ahead into the digital future, there's one more skill that video servers haven't mastered. Maintaining compatibility to the analog past.

That means you don't leave behind your installed base of Betacam® equipment. Or your valuable, even irreplaceable archive of Betacam tape.

So "tape-based or disk-based" is a baseless dilemma. What you really need is the best of both worlds: a flexible Sony solution, combining elements with proven fitness to solve the complex problems of the ongoing digital revolution.

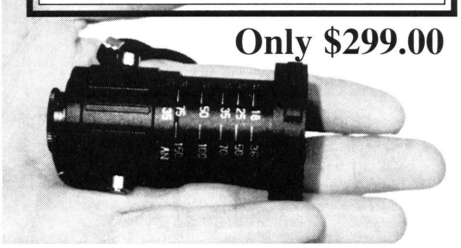
Sony explores digital issues in depth with a new series of technical papers. If you'd like a complete set, call 1-800-635-SONY, Ext. 33.

SONY

©1995 Sony Electronics Inc. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Sony and Betacam are trademarks of Sony.

Micro-Finder

Only $299.00



The Micro-Finder and Micro-Finder XL, feature aluminum construction, coated glass optics, and ultra compact design. Unlike most directors finders which are large and bulky the Micro-Finder XL, can be worn all day without neck strain. The Micro Finder offers the most commonly used focal lengths for both 16mm, Super-16mm, 35mm, 35mm anamorphic, and video use in a variety of aspect ratios. Every Feature of finders twice the price. Each finder comes with a padded carry case, and six month warranty.

Ratios: TV, 1.33, 1.37, S-16, 1.77, 1.85, 2.35, 2.55

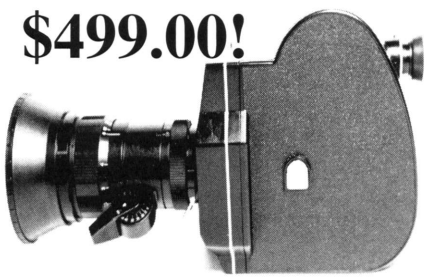
In Stock!

New! $399.00

New 16mm Cameras!

K-3 16mm

$499.00!



"Sophisticated optics, solid construction"
-Rene Chun *New York Times*
"A steal at twice the money"
- Jack Watson *Moviemaker Magazine*
"Well made bargain"
-William Wages *ASC*

Now available in Super-16. All cameras come with a complete set of accessories including 17-69mm zoom lens, pistol grip, shoulder brace, five glass filters (ND, UV, Light and Dark Yellow, #2 Diopter), cable release, case, warranty, and more! The camera utilizes rotating mirror reflex viewing, and has an operating range from 8-50fps with single frame. Made of solid aluminum construction it has a through the lens light meter. Available in optional Arri-B, Nikon or universal screw mount. Call today for a free brochure.

MKA ***Tel: 212-219-8408***
Fax: 212-219-8953

Equipment Rental House Opens

Plus 8 Video, an equipment rental company catering to the television production industry, has opened a new facility in West Los Angeles. The facility has available leading-edge cameras such as the Sony DVW-700 Digital Betacam camcorder, as well as equipment for producers providing programming for international markets, where the prevailing television system is 625-line PAL. The company's inventory includes one of the only Sony DVW-700P PAL Digital Betacam cameras in North America.

Plus 8 Video, (310) 442-4712.

Fund for Minority Filmmakers

Steve James, director and co-producer of the acclaimed documentary *Hoop Dreams*, has spearheaded a fund drive at his alma mater, Southern Illinois University at Carbondale, to help aspiring minorities who dream of following in his footsteps.

James gave the school $5,000 to establish the Minority Filmmakers Award Fund. The money is part of a prize package he received this year when he was named MTV's Best New Filmmaker of the Year for *Hoop Dreams*. The school hopes to bring in at least $100,000 to establish an endowment that would allow the school's Cinema and Photography Department to award two $2,000 production grants each year.

Contributions are tax-deductible and can be made to the Southern Illinois University Foundation and earmarked for the Minority Filmmakers Award Fund, and sent to Gary P. Kolb, Cinema and Photography Department, Southern Illinois University, Carbondale, IL 62901-6610.

New Film Center

The International Film & Video Workshops of Rockport, Maine will open a satellite campus this spring in the Monastery Sant'Anna in the Tuscany countryside. The new European Film Center will offer 30 one-week workshops and master classes in cinematography, directing, writing, producing and camerawork.

Most of the Tuscany Film Workshops are for working film and video professionals, but there are also introductory workshops for those just entering the industry. A four-week Summer School Program will help university film students and others learn film production through a series of hands-on workshops as they make their own films.

The faculty for the workshops are professionals from the Hollywood and European film communities. While all courses will be taught in English, bilingual teaching assistants will help with technical translations.

The Tuscany Film Workshop Center is located in a 14th-Century Benedictine monastery, set deep in the hills of Tuscany and the location of the recent production *The English Patient*. The monastery offers space for studios and classrooms, a theater, editing rooms, rehearsal studios, and interior and exterior locations. Accommodations and exceptional meals are provided.

The workshops begin May 5 and will run for six weeks. These one-week workshops include training in the latest 35mm film and video cameras, lights, electronic editing, production and directing methods used in feature film production. The emphasis is on production techniques used in American films, although European techniques are also embraced.

The International Film & Television Workshops, (207) 236-8581, FAX (207) 236-2558.

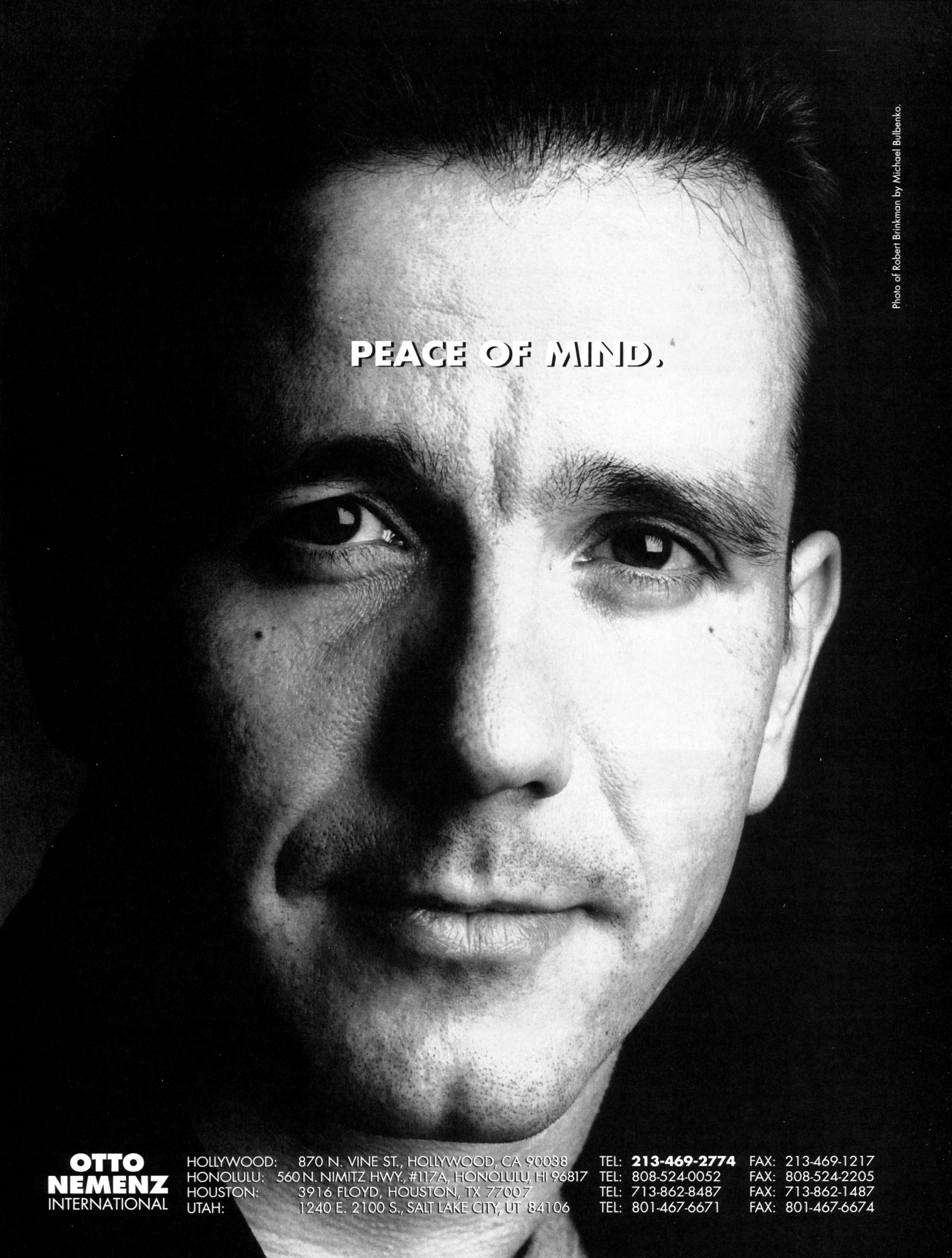
Military Helicopters for Film Use

West Coast Helicopters recently demonstrated two Bell Cobra helicopters, designed as attack helicopters by the military and available for use by the entertainment industry for the first time. The machines' sleek, black exterior and military weaponry make for a very intimidating aircraft. The Cobras, piloted by company owners Alan Purwin and Michael Tamburro, will make their debut in *The Rock*, starring Sean Connery, Ed Harris and Nicolas Cage.

West Coast Helicopters, (818) 901-0977.

Finance Company Formed

Media Capital Associates, a privately-financed leasing company for the entertainment industry, has opened its doors. Created in response to industry demand for more customized leasing programs, the company provides its own financing and will act as consultants in



OTTO NEMENZ INTERNATIONAL

HOLLYWOOD:	870 N. VINE ST., HOLLYWOOD, CA 90038	TEL: **213-469-2774**	FAX: 213-469-1217
HONOLULU:	560 N. NIMITZ HWY., #117A, HONOLULU, HI 96817	TEL: 808-524-0052	FAX: 808-524-2205
HOUSTON:	3916 FLOYD, HOUSTON, TX 77007	TEL: 713-862-8487	FAX: 713-862-1487
UTAH:	1240 E. 2100 S., SALT LAKE CITY, UT 84106	TEL: 801-467-6671	FAX: 801-467-6674

Film to Tape

talent

da Vinci Renaissance Color Correction

Dailies with Keylink

tools

NTSC & PAL Avid & On-line Editing

Foreign Conversions

experience

15 West 20 Street NY NY 10011

Fax: 212.989.7720

PrimeTime Post

800.626.8776

researching and developing financial programs and opportunities that provide the best rates and match for a client's requirements.

Media Capital Associates, (602) 941-8558.

Independents Organization

Independent Feature Project/West has formed the Indie Alliance, an association of entertainment professionals committed to increasing collaboration between the independent filmmaking community and the supporting arts. Founding Indie Alliance members include Wes Craven, Claire Danes, Danny Elfman, George Huang, Laurence Fishburne, Laurie Parker, Frank Scherma, Kevin Smith, Eric Stoltz, and Justin Tanner.

Membership includes exclusive invitation to quarterly receptions and IFP/West year-round programming with the goal of assisting members in developing valuable creative and business contacts.

IFP/West, (310) 452-8425.

London Film Commission Established

After ten years of planning, the city of London has finally founded a municipal film commission, following promises of support by the Department of National Heritage (which funds the British Film Commission) and other British companies and institutions. More than 70% of the first year's financial target for operating costs have been acquired, thanks to funds from the Corporation of London, more than 20 businesses, and the National Lottery.

During its 4 ½ years in operation, the British Film Commission has supported initiatives to establish commissions throughout the United Kingdom, and is currently assisting commission projects covering Northern Ireland and the northwest of England.

The British Film Commission, 70 Baker Street, London W1M 1DJ, 44 171 224 5000, FAX 44 171 224 1013.

Helicopter Tricks

Spacecam president and director of photography Ron Goodman and film pilot Geoff Palmer recently executed a series of shots 100 feet above the surf at Lyons Head (north of Toronto) for a Bell Canada commercial. The shot consists of an extreme close-up of a little girl and her father looking at the stars from an outcropping of rock high above the water, then widens out to reveal the grandeur of the location and a sky full of stars.

The sequence was shot day-for-night, with the stars to be added in postproduction, but due to the nature of the helicopter move, the sequence had to be executed in reverse, starting with the wide shot and moving in to the extreme close-up. A live microwave link to the ground allowed the director and agency personnel to watch the shot as it was being done.

Spacecam also recently assisted in a Nike spot starring football superstar Marshall Faulk, in which he is pursued in his fancy sneakers by everything from the opposing team to cars, trucks, helicopters and jet planes.

Film pilot Mike Tamburro and Spacecam director of photography Bob Mehnert chased the athlete through a windmill farm near Tehachapi, California. Also in pursuit were two Twin Star helicopters painted black. The Spacecam, mounted on the nose of a Jet Ranger 206, shot through the spinning windmills and their support towers to help create the fantastic look consistent with the mostly computer-generated art direction.

Spacecam Systems, 31111 Via Colinas, Westlake Village, CA 91362-3909, (818) 889-6060, FAX (818) 889-6062.

More Web Sites

The following companies and institutions are online at the World Wide Web:

The American Film Institute (AFI Online): http://www.afionline.org/.

Florida State University Film School: http://www.fsu.edu/~film/.

Kodak Motion Picture and Television Imaging business unit: http.//www.kodak.com.

Mobile Production Service (a motion equipment rental and sales company in Dallas, Texas): http://www.visualimage.com/mps/. (They can also be contacted at MPS@visualimage.com)

Upcoming Events

March 1-3 (New York) and March 8-10 (Los Angeles): Robert Bordiga's Nuts & Bolts Production Semi-

Six months of planning... four days of setup... 10 minutes of daylight left... and I'm looking at the perfect shot...

It better look this good in transfer

It will. The telecine for the next century is coming April 1996. See it at NAB booth 9300.

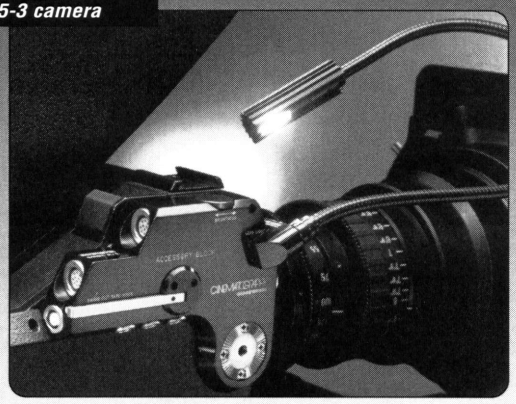
BTS

A PHILIPS COMPANY

Upgrade the power of any ARRI 35-3 camera

ACCESSORY BLOCK
and Lens Light

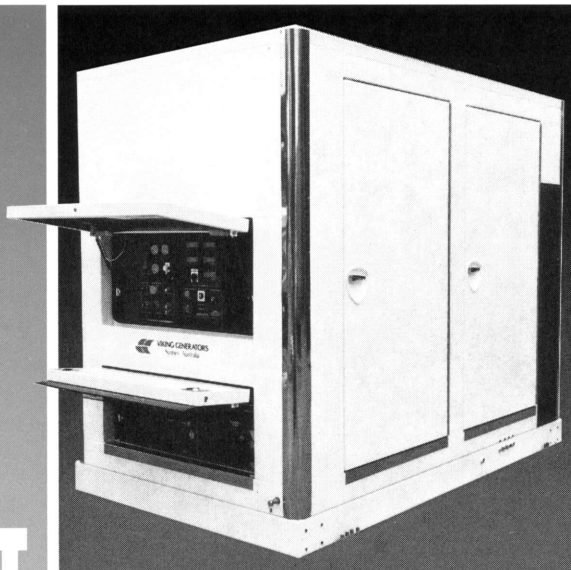
- 7 connectors expand accessory options while reducing the usual tangle of cables.
- Self resetting circuit protection on each connector.
- Swing out tape hook helps clear large matte boxes.
- Lens Light with flexible 20 inch gooseneck positions a high intensity light above the work area.



CINEMATOGRAPHY electronics Inc.

31238 Via Colinas, Suite A • Westlake Village, California 91362 • USA • Phone (818) 706-3334 • Fax (818) 706-3335

YOU MEAN YOU HAVEN'T HEARD US!



THAT'S PROBABLY BECAUSE WE BUILD THE QUIETEST GENERATORS IN THE BUSINESS!

- Outputs from 12 - 210KW (100 - 1750A) with Cummins or Kubota diesel engines
- Double walled aluminium enclosures with sound levels less than 45dba @ 50 feet
- Switch selectable multiple output voltage and frequency from the one unit
- Multifunction backlit digital display
- Local service and warranty support
- Competitive long term leasing packages

VIKING GENERATORS

MANUFACTURERS OF QUALITY LOCATION POWER SYSTEMS FOR THE FILM & TELEVISION INDUSTRY

7 TEPKO ROAD TERREY HILLS NSW 2084 AUSTRALIA

TOLL FREE 1-800-551 6095

OUTSIDE U.S. AND CANADA
PH: 61 2 450 2800 FAX: 61 2 450 2900

nar, (800) 755-7763.

March 6-April 7: "Gregory Markopoulos: Mythic Themes, Portraiture and Films of Place," Whitney Museum of American Art, New York City, (212) 570-3633.

March 8-17: 10th South by Southwest Music & Media Conference, Austin, Texas, (512) 467-7979, FAX (512) 451-0754.

March 12-17: Ann Arbor Film Festival, (313) 995-5356, FAX (313) 995-5396, vicki@honeyman.org.

March 21-24: Society for Photographic Education 33rd National Conference, Los Angeles, (817) 272-2845, FAX (817) 272-2846.

April 2-6: 29th Annual Humboldt Film Festival, Humboldt State University, Arcata, California, (707) 826-4113, FAX (707) 826-5494.

April 3-6: Sixth Carolina Film and Video Festival, University of North Carolina at Greensboro, (910) 334-5360, FAX (910) 334-5039.

April 5-7: Canyonlands Film and Video Festival, Moab, Utah, (801) 259-3330.

April 12-21: 29th Annual Worldfest Houston, (713) 965-9955, FAX (713) 965-9960.

April 15 Deadline for Entries: Videonics Second Annual Thoughts and Dreams Competition for middle- and high-school students, (408) 866-8300, FAX (408) 866-4859.

April 18-22: Los Angeles Independent Film Festival, (213) 937-9137.

April 22-28: Imaging the Future II: Storytelling for a New Millenium, presented by the Kauai Institute for Communciations Media and the AFI, Kauai, Hawaii, (800) 999-4234, FAX (213) 467-4578.

CLIMBING COLUMN

CINEKINETIC
LEGENDARY AUSTRALIAN
DINKUM
EQUIPMENT

See us at NAB '96,
Booth #8181

- Top mounts to any dolly
- Two minute assembly
- Fully height adjustable
- Unobstructed 360° pans
- Removable seat
- Accommodates Cinekinetic's entire range of jibs
- 150 mm verson available as optional extra

Climbing Column **$2,250.00**

Sawed Board Dolly **$950.00**

Price includes shipping anywhere in the U.S.A.

Send $10 for our dynamic new video that shows Cinekinetic's complete range of products in action.

CINEKINETIC

Cinekinetic Australia
2 Avon Court, Thornlie
Western Australia 6108
Tel: + 61 9 459 3690
Fax: + 61 9 493 2168

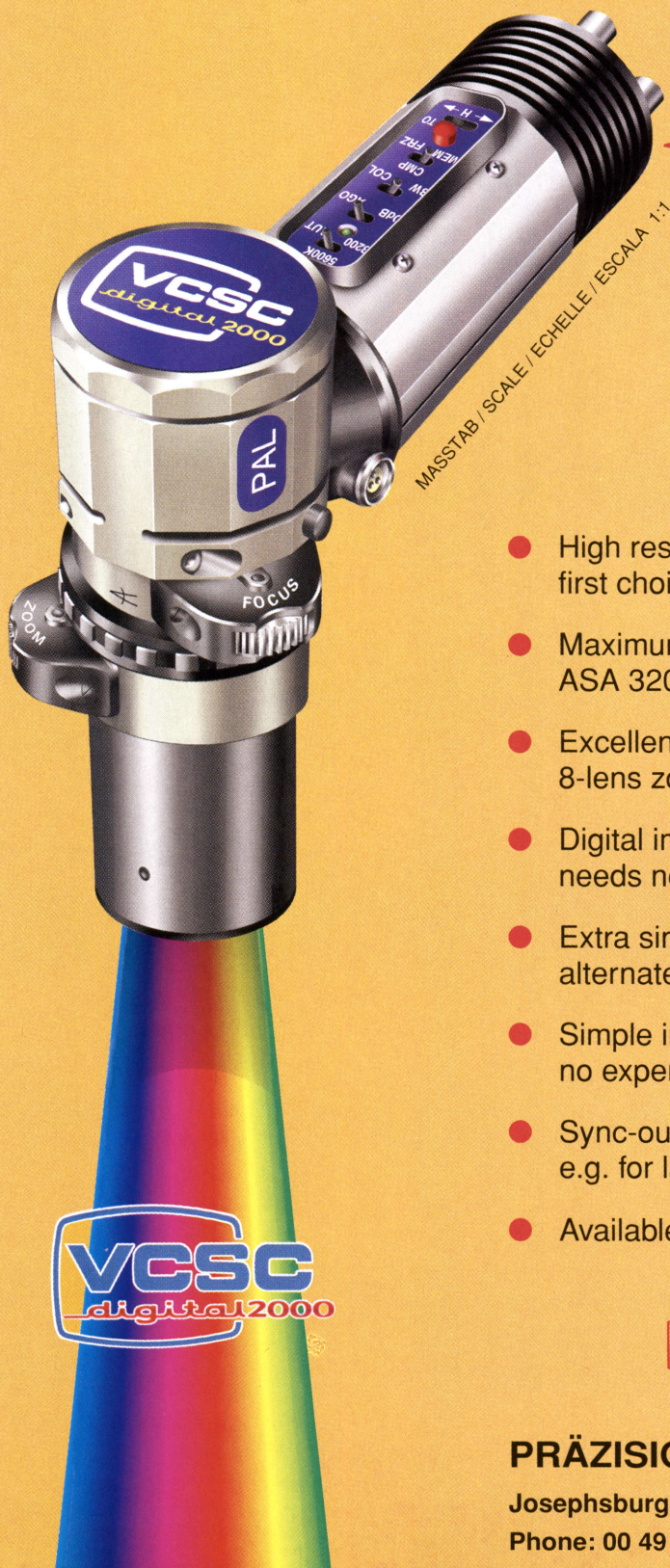
Cinekinetic USA Inc.
1405 Vegas Valley Drive #177AC
P.O. Box 73063
Las Vegas, NV 89170
Tel: (702) 731 4700

Shown mounted on Sawed Board Dolly

Quality made by Denz • Quality made by Denz • Quality made by Denz • Quality made by Denz

Color video assist totally flickerfree from 10-300 fps

for all 16mm and 35mm film cameras
Smallest one-piece package
Compact, hermetically closed



new

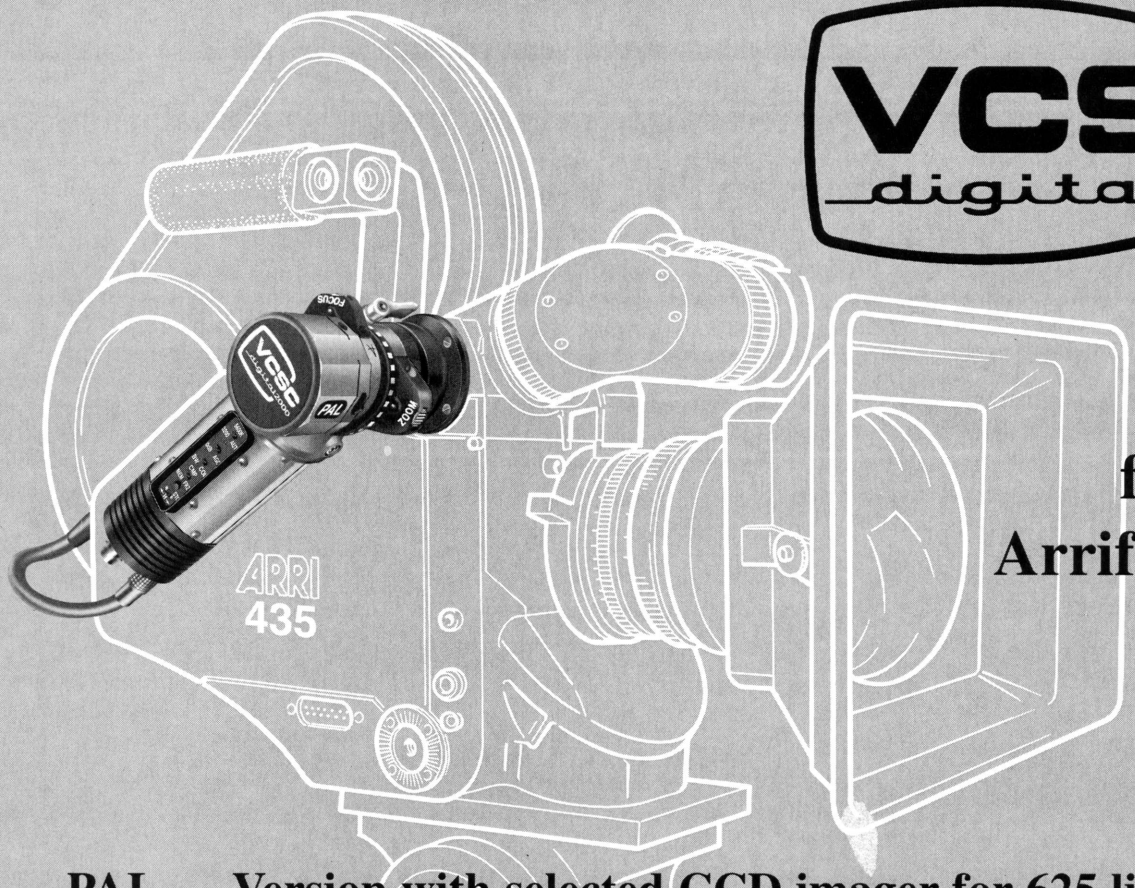
- High resolution, 6.5 MHz, 560 000 pixels, first choice „Lens on Chip"-CCD
- Maximum sensitivity, for film stock up to ASA 3200, AGC switchable
- Excellent image quality, due to incorporated 8-lens zoom transmission system
- Digital image processing and storage, needs no sync-signal from film camera
- Extra single-frame store, automatic alternate frame display for masking
- Simple installation at minimum cost, no expensive optical adapters
- Sync-output for accessories, e.g. for laser pointer application
- Available in PAL and NTSC

peL denz

PRÄZISIONS-ENTWICKLUNG DENZ
Josephsburgstr. 81-83 · D-81673 München
Phone: 00 49 89 - 431 60 47 · Fax: 00 49 89 - 431 69 67

Quality made by Denz • Quality made by Denz • Quality made by Denz • Quality made by Denz

VCSC
digital2000



for
Arriflex 435

PAL - Version with selected CCD imager for 625 lines
NTSC - Version with selected CCD imager for 525 lines

for
Moviecam
Compact

and for many other film cameras more

WORLDWIDE THE BEST
Color Video Assist

Quality made by Denz · Quality made by Denz · Quality made by Denz · Quality made by Denz

Cold-Blooded Scheming

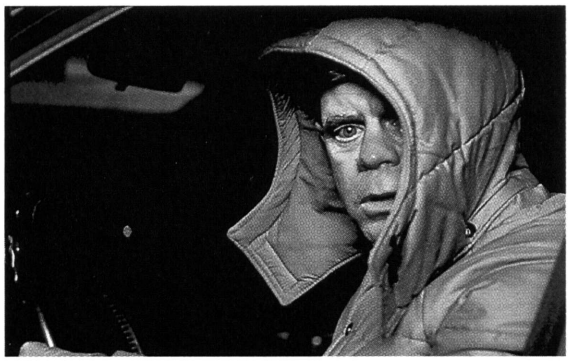
Roger Deakins, ASC, BSC teams with Joel and Ethan Coen for the third time on *Fargo*, a tale of a kidnapping gone awry in the chilly clime of Minnesota.

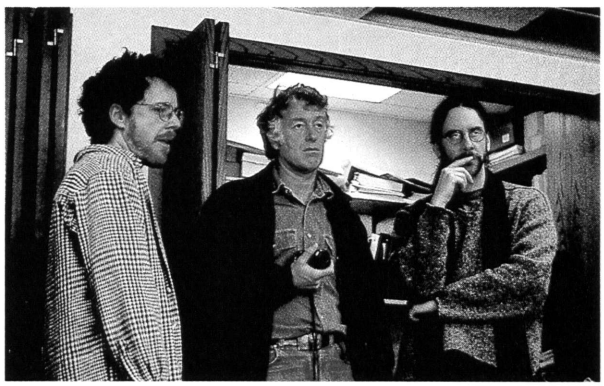
by Chris Probst

ROGER DEAKINS, ASC, BSC'S association with the filmmaking duo of Joel and Ethan Coen began on *Barton Fink*, and the echoes of that first collaboration still haunt the cinematographer.

"Roger still teases us about making him track down the plug-hole in the sink," says writer/producer Ethan Coen. Joel, who co-writes and directs all of their films, laughs and adds, "It was the only moment on *Barton Fink* when I think we really surprised him. But that shot was a lot of fun and we had a great time working out how to do it."

Interrupting his brother, Ethan continues their simultaneous telephone-interview tag-team act, which the duo insist upon with unsuspecting journalists. "But now, whenever we set up or talk about a shot that's even *remotely* strange, Roger arches an eyebrow and says, 'Don't be having me track down any plug-holes now!'"





Above: ***The hapless Jerry Lundegaard (William H. Macy), who initiates*** **Fargo's** ***twisted plot.*** **Right:** ***(left to right) Ethan Coen, Roger Deakins, and Joel Coen, who offers,*** **"Fargo** ***is closer to*** **Blood Simple** ***than our other films, but only in subject-matter.*** **Blood Simple** ***is a very dark movie and more baroque in its camera style. The idea of*** **Fargo** ***was to put things against a white, bright field."***

With *Fargo*, Deakins and the Coens continue in the outlandishly quirky and unique vein they previously tapped in both *Barton Fink* and *The Hudsucker Proxy*, while the cinematographer's other credits present a diverse mix that includes *1984*, *Sid and Nancy*, *Mountains of the Moon*, *The Secret Garden*, *Passion Fish*, *The Shawshank Redemption* (which earned the him last year's ASC Award, as well as an Oscar nomination) and the recent Tim Robbins film *Dead Man Walking*, which has garnered widespread critical acclaim.

Set in Minneapolis, Minnesota in the dead of winter, *Fargo*'s storyline revolves around debt-stricken car salesman Jerry Lundegaard (William Macy), who has engineered a plot to have his wife kidnapped by hired thugs (Steve Buscemi and Peter Stormare) in order to the extort a heavy ransom from his wife's tight-walleted father. Lundegaard schemes to use the funds to dissolve the financial avalanche that is threatening to bury him, but his flawlessly planned crime goes awry when his hired abductors gun down a state trooper and two hapless bystanders while transporting Lundegaard's wife to a remote cabin.

After his experience with the Coens on the large-scale, stylistic genre-parody *The Hudsucker Proxy* (see *AC* April 1994) Deakins submits that a smaller budget and crew was a welcome change. "It was nice doing *Fargo* with them after *Hudsucker*," he attests. "*Hudsucker* was quite a big picture. [The budget wasn't] a huge amount of money by today's standards, but that project had its own momentum. *Fargo*, on the other hand, was a small picture, but in a certain sense we could be more flexible because of it. Less pressure, a smaller crew and a much more intimate production are advantages in many ways."

"It was fun for all of us," Joel Coen agrees, "and a relief in a way. It was back to working with each other and a small crew in a very controllable environment, which was similar to how we had done *Barton Fink*. On *Hudsucker*, Roger had to essentially oversee four different units: the main unit, the second unit, the bluescreen unit, and the miniature stuff."

Early on in *Fargo*'s preproduction, the Coens had meetings with Deakins to discuss and solidify the visual style of the film, which is based upon real events that took place in the upper Midwest. "We always involve Roger very early," notes Joel. "Basically, what we do after we finish the script is sit down with him and talk in general terms about how we were thinking about it from a visual point of view. Then, in specific terms, we do a draft of the storyboards with Roger — showing him a preliminary draft of what we were thinking about — and then refine those ideas scene by scene. So he's involved pretty much right from the beginning. The style of the shooting is worked out between the three of us."

Even with the detailed

Photos by James Bridges and Michael Tackett, courtesy of Gramercy Pictures

A shot illustrating the Coen's requisite plane of "infinite dullness." Explains Ethan Coen, "You sort of avail yourself to whatever drama the location offers you. And in the case of Minnesota, where it's really flat, what's interesting are those dull days where everything is a sort of neutral field — no ground, no sky. That sort of anti-drama is what's interesting about the place, so that's what we went for." Adds Deakins, "I don't like putting light on day exteriors unless I really have to. For most of the exteriors I went with what was there."

preparation, Joel confesses that elements of a scene may depart radically from the storyboarded preconception. He explains, "Frequently, [storyboards] can be tossed out the window when we get on the set and the three of us see something that we'd prefer to do, given the location or whatever. But they're there as a guide, a point of departure for us to start talking about the movie with Roger from a visual point of view."

On set, Deakins and both brothers will work out the dynamics of a given scene, with Joel and Ethan frequently switching hats. "Either of them will be talking about the shot, lenses or whatever," says Deakins. "They just swap around duties. I think having a relationship with them on a couple of films before this made it easier to do a project on a small budget and get more out of it. Once you've got a pattern of working, you know how to cut corners, and what each other's wants are. We don't have as much discussion on the set anymore about shots. We basically block the scene in the morning and go through the shots. It's quite a quiet set!"

"We're very interested in the cinematography," submits Joel. "From the beginning, it's something that we've always spent a lot of time on with Roger because we enjoy it, we enjoy thinking about it, and it's fun for all of us to work out together."

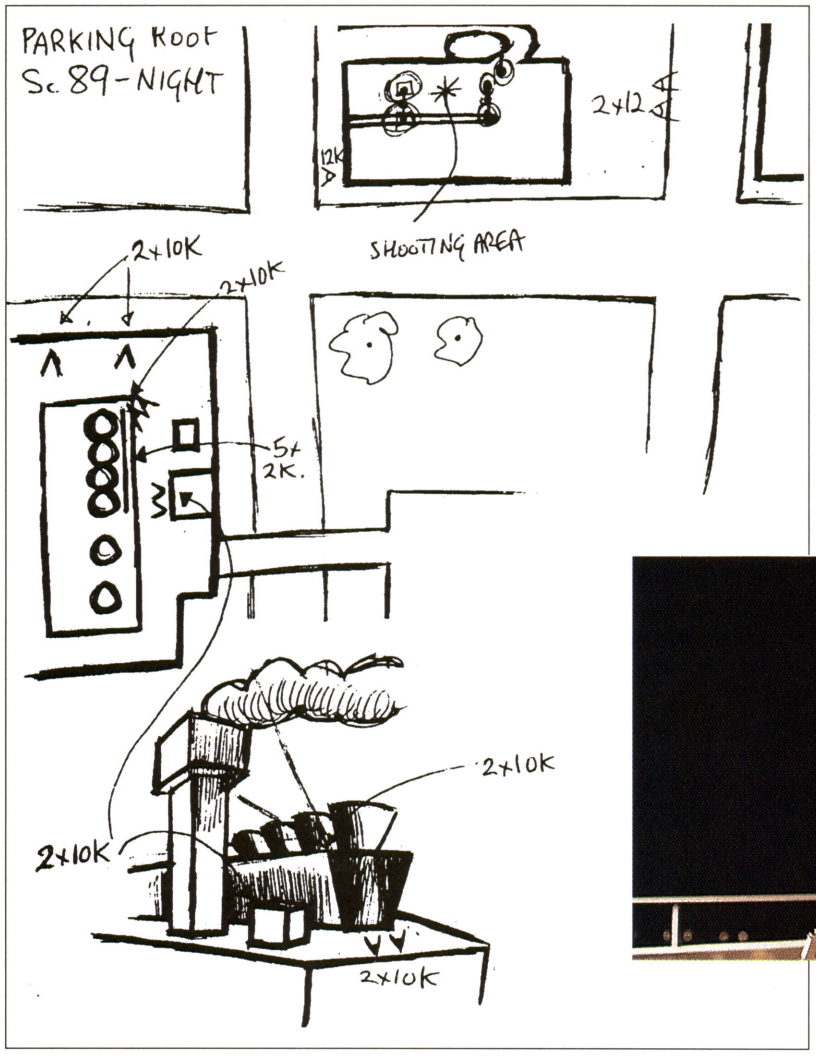
Deakins has had a long-standing debate with the Coens about their affinity for wide-angle lenses, which all too often results in an on-set bidding-war for the optimum lens choice. Ethan proclaims, "We've gotten better actually, partly because of Roger's influence." Joel expands wryly, "He has been quietly bringing us around to longer lenses. It's a joke between the three of us. We're now up to 32mm and 35mm lenses!"

Laughing, Deakins retorts, "On *Hudsucker* I'd put on a 28mm and they'd say, 'Shouldn't this be an 18mm?'" But after three films, Deakins' cajoling seems to have taken root. "On *Fargo*, we shot longer lenses than the Coens have ever shot before," he notes. "Our main lens was probably a 40mm or a 32mm, whereas normally it would be a 25mm."

"I think it still is a prejudice with us — wanting to go wider more often," admits Ethan. "It has to do with wanting to enhance the camera moves. For instance, in *The Hudsucker Proxy*, a lot of the effects stuff, the falling shots, were quite wide in the interest of making the moves and the falling more dynamic."

"And that was sort of the idea of this movie," relates Joel. "It was interesting to try and restrain ourselves. Unlike the movies we have done in the past, we wanted to take a more observational approach to this, because the story is partly based on real life. We moved the camera far less and used a lot more over-the-shoulders."

The Coens and Deakins also strove to accentuate the dull and non-eventful nature of the rural Midwest, and to juxtapose this atmosphere against their highly eventful tale. Explains Joel, "First of all, we were trying to reflect the bleak aspect of living in that area in the wintertime — what the light and this sort of landscape does [to a person,] psychologically. It was very important for us to shoot on non-sunny days. We talked early on with Roger about shooting landscapes where you couldn't really see the horizon line — so that the snow-covered ground would be the same color as the sky — on these sort of slight gray or white-out days that you get in Minnesota.



Deakins' sketch of the roof-top parking-garage location (right) and a corresponding image from the scene (far right), featuring actor Steve Buscemi. The warm side key-light and fill was created by eight Fay bulbs rigged to each of the practical sodium-vapor street lamps which were gelled with a combination ¾ CTO and CTS. The foreboding smokestack in the background was illuminated by 10K tungsten units hidden on the building's rooftop.

We scheduled the show so that we would be able to avoid blue skies as much as possible.

"In one respect," he continues, "we were unlucky in that there was very little snow in Minnesota while we were shooting there. We actually ended up moving to North Dakota for the end of the show — chasing the snow. On the other hand, the landscape up there is even flatter and more bleak than it is around Minneapolis. We wouldn't have shot there had the weather been alright in Minneapolis, so in a sense we got more interesting exteriors than we might have otherwise."

Deakins concedes, "They wanted [the look of the exteriors] to be quite bland. It's kind of a difficult balance to do something that's bland but not boring. They wanted it very real, very middle-America. In fact, we chose some of the locations because they were particularly bland. Both the designer [Rick Heinrichs] and I would say, 'Well, that's *really* nothing!' I mean, you still have to make it interesting, but they always manage that anyway. I think the Coens could probably make a blank white wall interesting."

Deakins once again employed his camera of choice, an Arriflex BL-4, outfitted with Zeiss prime lenses. He exposed on his favorite stock, Eastman's 200 ASA EXR 5293. "I've shot on BLs for years. When we were doing car rigs it was probably -10° to start with, plus we were going along at 40 miles per hour. It was pretty cold, but the old BLs handle that pretty well. We also made up heater barneys for the camera and special heated boxes for the batteries so the charge wouldn't drain too quickly."

With it's limited budget, all of the film, save for a small bathroom set, was shot on location in Minnesota and North Dakota in practical, working establishments and locales. Utilizing available exterior light through windows and augmenting the existing lighting in a location proved to be a quick and efficient methodology.

"I was very much working off of natural sources," recalls Deakins. "It's not something I always do, but I suppose I do it more often than not. Particularly on *Fargo*, where we wanted a naturalistic feel, I was working a lot more with practicals — boosting practicals and putting little gag lights in. A lot of the film was shot in bars and clubs, so basically you have to work with the production designer to install the kind of practicals you want."

Bill O'Leary, Deakins' gaffer, specifies, "Usually, we go with a high-wattage standard household bulb, like 150 or 200 watts. We then always put the lights on dimmers. *Fargo* was basically lit with existing fixtures with higher-watt bulbs: we'd go over-wattage, put it all on a dimmer, and then dial it down to warm it up a bit."

"To me, that's the essence of lighting in locations — getting the right practicals," states Deakins. "I'll spend a lot of time with the prop-buyer and set dresser just to make sure I've got options with practicals, so that if I want a certain amount of light in a certain place, I can put a practical there rather than have to rig a light. I may also hide a light behind the practical. It gives me flexibility on the set and is much more realistic. Maybe I have a problem thinking that I can't put a light there unless there's a reason for it.

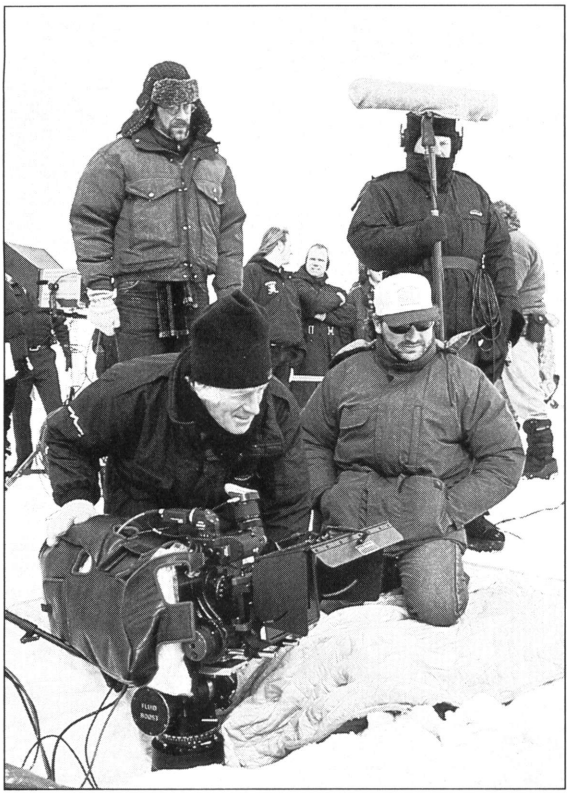
When you track, crane, float or fly, let your imagination soar with the finest, most capable gyro stabilized camera systems in our industry.

©A.M.P.A.S.®

Citing Spacecam for "Expanding the boundaries and applications of stabilized cinematography", The Academy of Motion Picture Arts & Sciences has awarded Spacecam Systems the Academy Plaque for Scientific & Engineering Achievement.

SPACECAM

Spacecam Systems Inc.,
31111 Via Colinas,
Westlake Village CA 91362,
(818) 889-6060, Fax (818) 889-6062



Deakins aligns a shot in a snow-covered locale. Note the barney and heater-blanket combination warming the Arri BL-4. "The problem with shooting in winter," explains Deakins, "is that you don't get a very long day. So you set up for the first possible chance that you can shoot. You might be shooting a T2 on the first shot, but by the time you've done the second or third, you have a T22. The trick then is to ND down to get a balance between what you shot wide-open and something that has a very high level of light."

"I didn't really have a big lighting package at all," he remembers, "but I worked within those terms. On something like *The Shawshank Redemption*, everything was lit. But on *Fargo*, if there wasn't daylight, we literally couldn't do the shots."

Besides the added intimacy of the smaller crew and a tighter collaboration with Deakins, the Coens also enjoyed being liberated from the logistics of large-scale film production and immense stages. "The last movie we did with Roger was shot entirely on stage, and this movie was entirely real locations with the exception of two small bathroom sets," explains Joel. "Most of the interiors, which were mainly small bedrooms, houses, and offices as opposed to big spaces, were lit by window-light during the day. The impulse here was to de-dramatize things rather than dramatize things. And that extended to the lighting as well."

Says Deakins, "I think it's a dark comedy. You usually light up comedies, but the Coens didn't want to do that. This film was closer to the contrasty style of *Barton Fink*. *Hudsucker*, on the other hand, was deliberately less contrasty, deliberately more lush; it wasn't necessarily flat-lit, but it was meant to look kind of opulent. *Fargo* is meant to look real and raw.

"I religiously do diagrams of every set or location," he continues. "I plan the lighting so that when I get to the set we've had the electricians pre-rigging, and I can look to see if the idea I was going for is working. That also gives me more time to play with the lighting before everybody else is ready to shoot."

For the car chase near the opening of *Fargo*, the Coens elected to contrast the day snowscape exteriors with a stark-black, sepulchral night sequence. "We wanted the effect of being on the road at night, when everything is totally black," says Deakins. "Then we cut to the daytime, when everything is totally white. There's an incredible contrast. We decided not to do anything like an ambient moonlight effect; we lit the nighttime chase with 12-volt rigs attached to the bumper of the car, as though the shots were lit by washes off the headlights."

For the traveling car rigs, O'Leary says that he and best boy Bill Moore utilized "surplus lamps and housings that are used on military-type vehicles and that are actually smaller than a car headlight. Bill, who builds a lot of these rigs, built a bar that we attached to the bumper and set up a row of six of these lights in front of the grill. We could then either pan them further up the road to light into the foreground for shots looking out the windshield, or pan them to the left for angles looking out at the crashed car."

As Lundegaard's scheme to usurp his father-in-law's million-dollar ransom proceeds, the inevitable money-drop is arranged. The simple plan, however, is disrupted when the wealthy and domineering tycoon steps in, demanding to make the drop himself for his daughter's return.

For the pivotal exchange scene, the Coens elected to shoot on top of a snow-covered exterior parking garage. Joel offers, "We chose that location because there was a smokestack belching away on the roof of a nearby building, and we wanted to use that as a background for part of the scene. The special effects people had to snow that entire area because there was no snow. In fact, a lot of the snow in the movie was manufactured."

The scene was lit with harsh yellow-orange sodium-vapor streetlights that spilled warm pools of light on areas around the rooftop. Deakins augmented the look with an orange sodium-vapor effect from above, "which was a combination of ¾ CTO and CTS. I think it works quite well because it gives the scene a sort of eerie feeling."

O'Leary adds, "We boosted the streetlamp practicals that were there by building a carriage that sat over the top of the housings like a saddle and hanging a pair of two-light Fay bulbs on either side so that they were running right by the existing sodium-vapor lamps. On each streetlight we had eight extra Fay bulbs to boost the effect. We then just warmed them up a little with CTO and straw to match the warm sodium look."

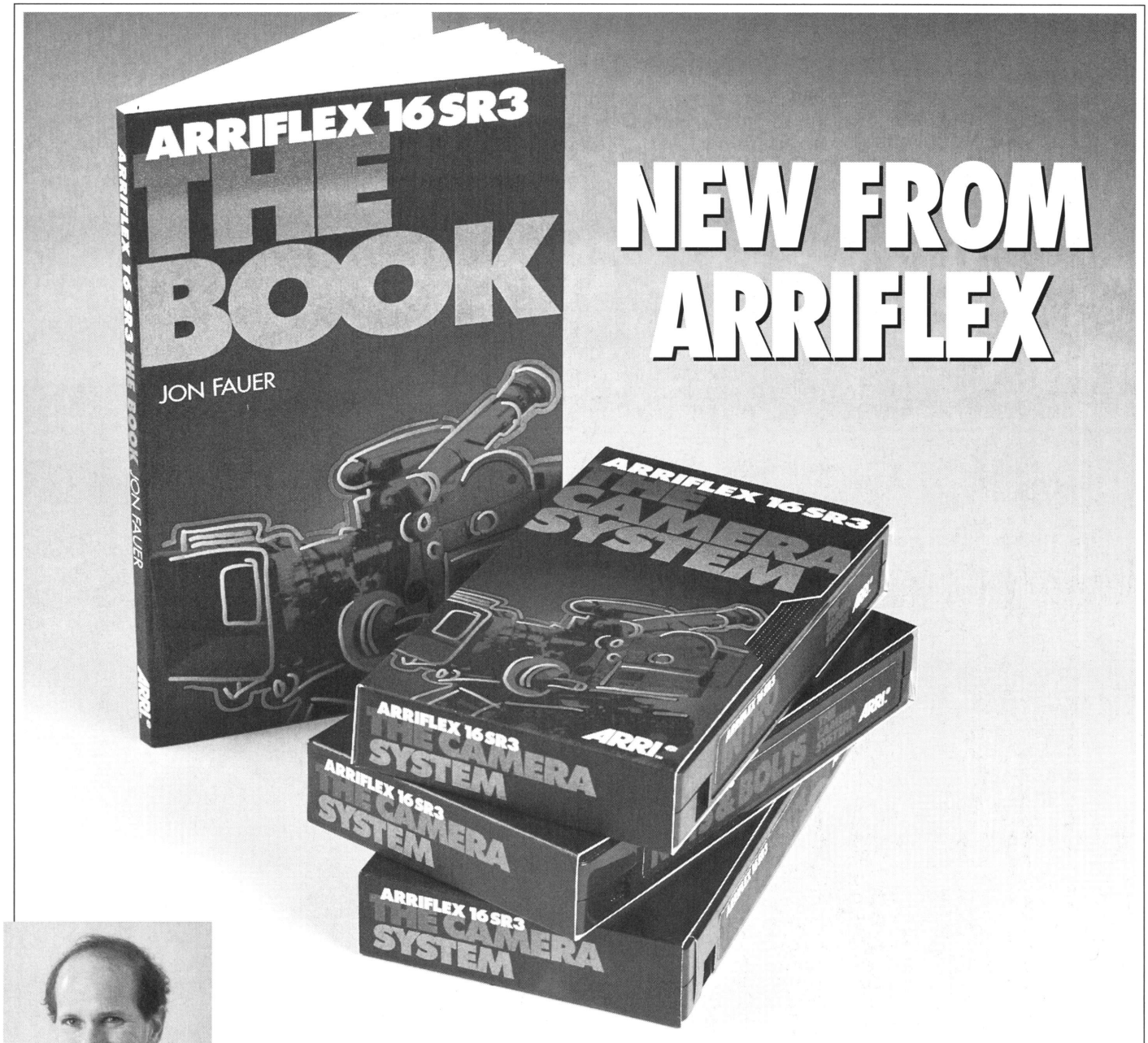
"We lit the surrounding buildings," he continues, "the smokestack tower and the top of a heating plant's cooling stacks, by hiding 10K lamps right on the building's rooftops. We also had 12K HMIs down on the streets that were corrected halfway back."

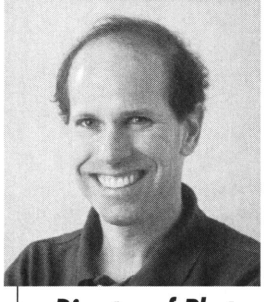
Deakins offers, "I worked with a lot more colors on *Fargo* than I have on either of the Coens' other films. When street lighting started switching from mercury-vapor to sodium, I was a bit worried, because I loved the sort of cold-blue streetlight look. But now I've gotten to like the sodium look.

"I tend to gel lights," he elaborates. "I don't just print things to be a certain color. Some cinematographers print the frame to a particular color, a particular look. I like to use a lot of colors in one frame."

Observes Joel, "I think in a lot of cases Roger was trying to include a warm source and a cold source in the same frame. For example, in a scene in a garage with a mechanic working under a car, there's this warm cage light on him and then cold exterior light coming in."

Outlining his approach to the above-mentioned scene, Deakins notes, "When [actor] Wil-





The 16 SR3 book and film series by *Director of Photography* Jon Fauer. An indispensable guide for cinematographers, camera assistants, producers, rental houses and film students.

The Book

Arriflex 16 SR3: The Book

A hands-on detailed guide written in the same lively, easy-to-follow style as the acclaimed *ARRI 16 SR BOOK* and *ARRI 35 BOOK.*

The Film Series

Intro: A day in the life of the new Arriflex 16 SR3 camera system across North America: in studios, on location, hand-held, remote controlled, underwater and in the air. 8 min. VHS.

Camera Prep: A detailed tour of the 16 SR3 camera presented by real camera assistants during checkouts and shoots: preparing, mounting, testing, loading, cleaning, packing. Approx. 45 mins. VHS.

The System, Tips and Techniques: Advanced features of the Arriflex 16 SR3 Camera System: lens control systems, speed ramping, laptop computer control, Super 16 conversions, timecode, post-production, and more. Approx. 60 min. VHS.

Book and films are offered in a specially priced set or sold separately. To order, contact your local rental house or Arriflex Sales Dept. at any of the locations listed below.

ARRI

ARRIFLEX CORPORATION

617 Route 303, Blauvelt, NY 10913-1123
Fax (914) 425-1250 • (914) 353-1400

600 N. Victory Blvd., Burbank, CA 91502-1639
Fax (818) 848-4028 • (818) 841-7070

©1996 ARRIFLEX CORPORATION

Lunch time was a while ago. Now the DP wants a mesmerizer for tomorrow. Now what?

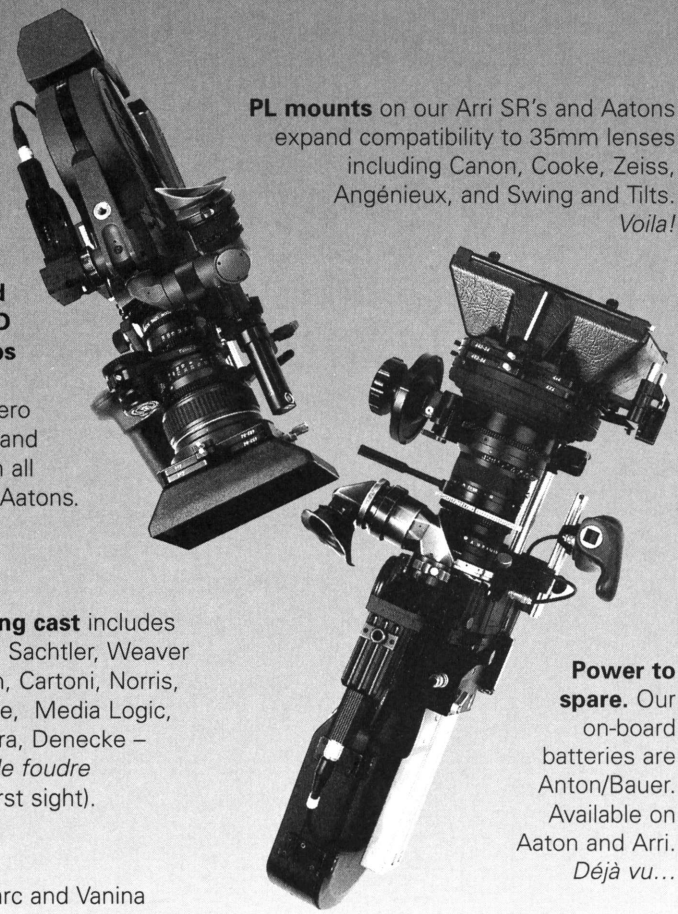
Film/Video Equipment Service Company

Call 800-776-8616 for Free Catalog

We'd really love to rent you your whole package, but, hey, parts is parts.

Hand Held With Care

Complete 35mm, 16mm and Super 16 packages. Technical support, time code savvy, creative solutions at an affordable price. Check us out — then check out — at our conveniently located loft in Chelsea. *Mais Oui!*



PL mounts on our Arri SR's and Aatons expand compatibility to 35mm lenses including Canon, Cooke, Zeiss, Angénieux, and Swing and Tilts. *Voila!*

Custom B&W and color CCD video taps feature virtually zero light loss and work with all Arris and Aatons. *Touché!*

Supporting cast includes Chrosziel, Sachtler, Weaver Steadman, Cartoni, Norris, Microforce, Media Logic, C.E., Nagra, Denecke – all *coup de foudre* (love at first sight).

Power to spare. Our on-board batteries are Anton/Bauer. Available on Aaton and Arri. *Déjà vu...*

Sales: Marc and Vanina
Rentals: Jeffrey, Amanda and Dave
Call us for a quote or our rental catalog. *Mercí.*

Hand Held Films, Inc. 212 691-4898 Fax 212 691-4998
118 West 22nd Street, New York, New York 10011

liam Macy goes to meet the mechanic back in the garage, I shot without a filter. I diffused the windows with 250 and lit them. Because the location was a working car lot, I also changed all of the fluorescent tubes to daylight tubes. I used a practical cage light with a 200-watt bulb on a dimmer that I put under the car the guy was working on. I wanted that light to be really rich and warm, so to get the color difference between the daylight look and the practical, I shot clean uncorrected daylight. Sometimes I like a slightly cold look and I won't correct it on the camera. I'll just pull it back a bit in the lab.

"Photographically," he adds, "I wouldn't say that I've been more bold on *Fargo,* but I did play around a bit more. It's actually one of my favorite projects, though I don't think anything shouts out, 'Wow, this is great photography!' If you've got a huge amount of money and great big sets, it's actually not hard to make it look good. It's often more of a challenge to try to give a film a coherent style from start to finish, one that remains interesting and feels real."

Working with Deakins has rewarded the Coens with a kindred collaborator and a close friend. "We're lucky we found Roger," says Joel. "He understands what we are after, and frequently comes up with stuff on the spot that reflects what we want to do in the scene — but perhaps in a much better realization of it, given the setup."

"However," Ethan cautions, "whenever we fret about some sort of detail in the frame, or starting looking too closely at something, Roger simply says, 'Well, that could be my Gran in the shot and she's been dead for 20 years. Don't worry about it.'"

Joel adds wryly, "Actually, there's a lot of discussion about Roger's grandmother on the set. It's an important part of his work and it shouldn't be overlooked."

DLC
DYNAMIC LIGHT CONTROL

When a shot or scene requires some sensitive exposure and/or color manipulation, we invite you to take a close look at the latest innovation in film *laboratory* services from Foto-Kem/Foto-Tronics.

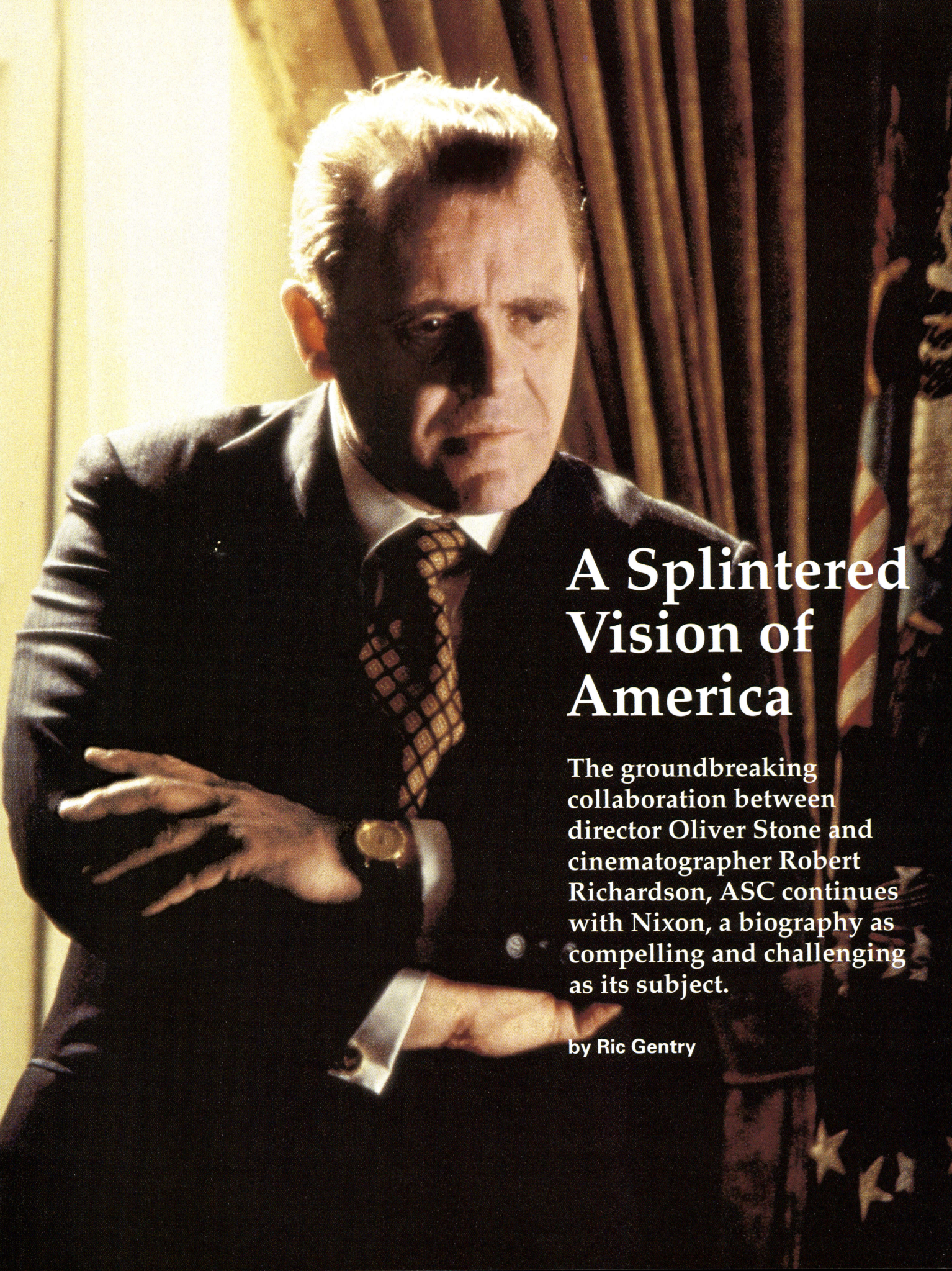
Dynamic Light Control.

This Foto-Kem proprietary process permits extremely small programmable light changes (up to 1/300th of a stop) to be made *within* a scene. DLC produces undetectable shifts in color and density which allow us to create beautifully timed answer prints, low contrast prints and Interpositives.

With DLC it is now possible to correct a variety of production/post-production problems—like poorly balanced optical dissolves; dolly shots traveling from shade to sunlight; in-camera speed changes; or other unwanted conditions or circumstances affecting image color or exposure.

If you want to see how Dynamic Light Control's remarkable range of applications can put your shot in the right light, come in and let us roll our demo reel for you.

FOTO-KEM
FOTO-TRONICS
BURBANK, CA
818-846-3102



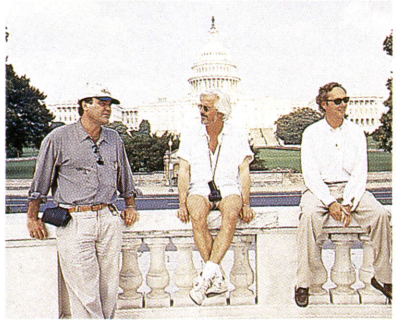
A Splintered Vision of America

The groundbreaking collaboration between director Oliver Stone and cinematographer Robert Richardson, ASC continues with Nixon, a biography as compelling and challenging as its subject.

by Ric Gentry

"WHAT LINKS ALL MY FILMS," begins director Oliver Stone, "is the story of an individual in a struggle with his identity, his integrity and his soul. In many of these movies, the character's soul is stolen from him, lost, and in some cases he gets it back in the end. I believe the highest ethic is the Socratic one, which says, 'Know thyself.'"

In one of the most powerful scenes in *Nixon*, Stone's epic biography of the 37th President of the United States and his 12th film as a director, the beleaguered chief executive (Anthony Hopkins) beckons Secretary of State Henry Kissinger (Paul Sorvino) to kneel with him in prayer on the Oval Office floor the night before he will announce his resignation from office — rather than forfeit the tapes that will incriminate him in the Watergate quagmire. Leaning forward, Nixon breaks down into a torrent of gut-wrenching sobs and wails. If at that moment his soul has not been lost, then surely this man has failed to sufficiently study himself.



Played out along a timeline that spans a substantial stretch of 20th Century U.S. history — the Depression, World War II, the Communist witch hunts, the Cold War, Vietnam, the civil rights struggle — the film, in examining Nixon, also probes the country that produced him. "The movie is a prism through which we might also see ourselves," the director submits.

For Stone, *Nixon* is thus familiar territory, an epic take on America, intricate in its psychology and rife with grand themes that culminate in a fall as thunderous as those of Shakespeare's tragic kings. "I've been fracturing [the nature of] biography for a long time now," he says, "but this [picture] is the most complex in terms of structure, going back and forth with time. The first hour and a half basically provides the antecedents of the man, the threads of his personality: poverty, class tension, Quakerism, death, bitterness — also, we must not forget, great idealism, invoked by his mother. But Nixon's idealism is more image than reality."

Whereas pundits have been prompt to consider the introspective tone of *Nixon* as a change in sensibility for Stone, the style is really a matter of adapting his technique to the nature of the material. His last film, *Natural Born Killers*, a satire on the mass media that offered both run-and-gun on-location immediacy and hallucinatory distortion, is virtually the tonal antithesis of *Nixon*, but this difference only underscores Stone's uncanny command of the medium. As on his previous nine films, Stone was aided by the visual brilliance of director of photography Robert Richardson, ASC, who returned to the director's side after shooting *Casino* for Martin Scorsese (see *AC* November '95).

The Stone-Richardson teaming has blossomed into one of film's most important and innovative collaborations. In addition to crafting works of visual beauty and power, the duo has detonated the traditional boundaries of cinematic language for feature films. Not surprisingly, both compare their long-standing friendship and collaboration, which began with *Salvador* in 1986, to a marriage.

"We know each other like a husband and wife do," Stone attests. "We fight. We disagree. But it doesn't get so emotional that we lose our bond. It was something we felt right from the beginning. It was one of those situations where someone walks into the room and you just know that he's going to be connected to you in this life."

"The long-term friendship creates a strong article of faith," Richardson points out. "It can get tough at times. I've been married for 10 years and that's been tough at times, too. But it's also as fulfilling as [a relationship] can get. It's like that with Oliver. It won't get any better."

Nixon, as it turned out, would at times test the limits of both their bond and their creative powers. Stone's struggle to find financing for *Nixon* has been well publicized. What is not known is that until a deal was finally struck with Cinergi a mere five weeks before shooting, the director sponsored all preproduction and three weeks of rehearsal out of his own pocket. "I was preparing the movie with no guarantee that it would be made," he says. "I was basically saying to Tony Hopkins, 'We're paying you and we're making this movie.' Thank God he didn't ask me for a bank draft or I would have been screwed."

Stone and Richardson both suggest that the film's $42 million budget was not as ample as it would ostensibly seem, especially in view of the 61-day shooting schedule and the scope and meticulous period detail the story required. "In fact," Stone asserts, "the script expanded in prep and I didn't add any days [to the schedule.] I was just jamming more shooting into the same days."

Richardson notes, "For a film of this length, dealing with so many actors, shooting in L.A. with all of the elements you expect in an A-picture, $42 million is a low budget."

Among other things, this fiscal reality made it imperative that the production work fast; the filmmakers averaging 25 to 30 set-

Opposite: ***Richard Nixon (a transformed Anthony Hopkins) oozes power in the Oval Office. The hot corona-rim effect, a Richardson trademark, has inspired the cinematographers of such films as*** **The Usual Suspects** ***and*** **Clockers.** **Above:** ***Nixon and Henry Kissinger (Paul Sorvino) pray for redemption, bathed in the "eerie" glow of an off-camera fire created by sequenced 9-lights and warm practicals.*** **Above left:** ***Long-time collaborators Stone, Richardson and production designer Victor Kempster take five on location in Washington D.C.***

Photos by Sidney Baldwin, courtesy of Cinergi Pictures Entertainment

The supercool Pat Nixon (Joan Allen) is cast in arctic blue as Nixon once again seeks her support on the campaign trail. Richardson often abandoned the conventional notions of "night" and "day" to light scenes exclusively for emotion or character.

ups per day. "We did shoot fast," Stone says, "but we also shot *well*. It became a growing experience as we shot." Production momentum never became an issue, and Richardson is quick to credit his crew (gaffer Christopher Strong, key grip Chris Centrella and first assistant Gregor Tavenner) for their alacrity and expertise.

As with *JFK* and *NBK*, virtually all manner of formats, cameras and techniques were utilized in forming the jigsaw visual fabric of *Nixon:* 35mm anamorphic with Panavision and E series hard lenses, 16mm with Arriflex and Zeiss lenses, and video with a Hi8 Sony camera, Betacam and a 1970s-model Ikegami. At various points they also incorporated footage shot with the antiquated, cumbersome tube cameras of the Fifties and Sixties, as well as handcranked 35mm and 16mm cameras; bluescreen and greenscreen composites; doctored stock footage; and approximately an hour's worth of specially-processed imagery.

Richardson's myriad stocks included 5293 for interiors and night exteriors and 48 for daylight exteriors; Plus-X and Double-X black-and-white in both 35mm and 16mm; and Ektachrome and Kodachrome color reversal for 16mm.

Curiously, lens filtration played almost no role in this approach, as he only employed sporadic fractions of the ProMist filter, usually a quarter but in rare instances a half.

Despite the visual possibilities at hand, Richardson is quick to point out that — with a 170-page script (co-written by Stone, Stephen J. Revele and Christopher Wilkinson), over 150 speaking parts and more lines for Hopkins than for the lead in *King Lear* — there was a particular devotion to dialogue. "This movie works like memory patterns," Richardson explains. "It triggers a process of thought and association, and its connections allow movements to almost any time or any place, both in the personal life of Richard Nixon and in the larger realm of national events. But there is also a special focus on words. Despite all of Oliver's gifts as a filmmaker, there is no question that language is the most important element of his films. After all, he began as a writer. In *Nixon*, he drove the word to the light. By that I mean that the character of Nixon is built on words, and the camera and lighting became subordinate to that.

"The initial idea, visually, was to keep the images mysterious and moody because of the amount of dialogue and because there's very little overt action in the film. Much of the film involves men in offices discussing policy and the personal and political life of an individual, so the concept was to keep viewers involved [with something beyond the words alone.]"

Most of Richardson and Stone's early films together were shot in 1.85:1, with a restless, probing, tension-inducing camera that seemed perpetually handheld. But their shift to 2.35:1 anamorphic, which began with *Born on the Fourth of July* (with the exception of *NBK*), also delivered a change in camera style. "Since the *Wall Street* approach to handheld, which was an escalation of [the style we'd used on] *Salvador* and *Platoon*, we haven't done much handheld work," observes Richardson, who operates his own camera to a great extent. "The anamorphic format itself does not lend itself very well to that. The lenses are bulkier and heavier, and they tend to pull your load forward. Also, the anamorphic frame is so much wider that you're much more aware of the horizontal lines. Overall, the effect of the anamorphic is to reduce instability visually. To me, that was worth the reduction in handheld opportunities."

But the use of anamorphic was only one reason that there were fewer kinetic camera moves in *Nixon*. "The reality was that we had to shoot so many pages in so little time," he explains. "It would have been too difficult to accomplish what we'd set out to do for each day in any other way. Therefore, [our approach] was more coverage of dialogue with static camera, since there wasn't a lot of movement in the performances. Usually we would deal with masters, using singles, mediums and close-ups, knowing that in certain areas we were going to provide energy by cutting away to other material built into the design of the film. Basically, it was a concession to budget limitations."

Because camera moves were reserved for moments of special emphasis, formal compositions became a much more important factor. "Nixon was a physically and mentally repressed man," observes Stone. "A modernized Ger-

man Expressionist style would be interesting for that, to keep the figures small in the frame, with a big space stretching over their heads to the ceiling. We also thought more about fractured compositions, where you exclude part of a head or a body, cutting parts off at the frame line. I can't say we stuck to that, but it was predominant.

"The camera in my films has been reflective of the subject's point of view. It stays outside, but I think it collapses the boundaries of the character. So often the style that governs the scene is based on a desire to know and to express."

"In the end, a truly active camera would have been wrong for this movie," Richardson adds. "The end result of a more static camera is a kind of stateliness. Although Oliver always got what he felt he needed, I can't say that I wouldn't have preferred to make more moves. But that doesn't mean *Nixon* isn't free form and dynamic. Parts are extremely intuitive, while others are shot in the most straightforward, classical manner. And some are a combination of the two, which gives the film its unique strength."

As postproduction supervisor Bill Brown gathered miles of archival footage from over 30 sources (for both insertion in the film and production team research), it was learned that a White House set had been established at Sony Studios in Culver City, as well as nearby Culver Studios, for director Rob Reiner's romantic comedy *The American President* (see *AC* November 1995).

With additions supervised by production designer and longtime Stone collaborator Victor Kempster, the existing *President* sets were deemed fully adaptable for *Nixon*. A key step was the installation of ceiling pieces to accommodate the filmmakers' further aspirations toward *Citizen Kane*-like low angles.

Kempster also aided in externalizing Nixon's traditionalist psychology. Richardson ticks off the various touches: "White walls for the bedroom. Four-poster bed. Simple linens. Simple desk. Early American. Colonial. Nixon was very conscious of being a Quaker. The conservative elements [of his upbringing and outlook] were naturally reflected in his politics as well."

In addition to his discussions with Stone, Richardson prepared for the shoot by watching hours of documentary footage pertaining to the Nixon era. "I wanted to absorb more of who he was," the cinematographer says, "to understand him and have context. It's part of the creative process for me — to work with Oliver, to make suggestions, to go for the strange thing to be filmed, a different format perhaps. I'm not saying my suggestions are right or wrong, but they're ideas about how to make something splinter, to refract an intention."

As the shooting days approached, Richardson would consult his own heavily-annotated script. "Some of the notes are conceptual," he says. "Some are in regard to lighting, some are about feeling. Some are things Oliver has said to me. Then when I go to the set with my ideas and talk things through with Oliver, he tells me his feelings about the lighting. He's always been involved with it."

Detailing his general visual strategy, the cinematographer asserts, "I gave the story what it called for. If it required high contrast, I put it there. Certain scenes just begged for that. But you're not going to perceive anything I did as being out of order. It's all in keeping with the flow of the film, but there were many scenes that were extremely challenging to light, if for no other reason than deciding how to provide each with feeling."

Stone initially encouraged the use of a minimum number of lights for the production. Richardson contends that there were two purposes for this. One was mood: a few strategically placed lights would create a gestalt of sharp illumination gradually falling off into steep darkness. Richardson cites Clint Eastwood's *Bird* and *Unforgiven*, both shot by Jack Green, ASC, as references. The second reason for the more modest lighting arsenal was again economics. Fewer lights would simply take less time to position, facilitating production momentum. "Bob asked for more in the beginning," Stone says. "But we had to cut the number down."

Even so, Richardson maintains, "I always had what I needed. The difference was that instead of pre-rigging, we had to move the equipment from one stage to another. We would often be caught in the position of having to do it as we were moving along, which caused certain delays."

Helping to regain ground, however, was his unique computer-controlled dimmer system. Gaffer Christopher Strong, a veteran of such films as *Seven*, *Species* and *Speed*, was working with the cinematographer for the first time and had never encountered such a system before. "It was extremely useful," he enthuses. "When we were on stage, every light ran through that huge dimmer system — all the practicals, all the AC outlets, and every light on the grid: Dinos, 20Ks, Maxis and 9-lights."

The system was regulated by a Lite Palette 90 computer console with 140 channels, a controller with enough memory to program a rock concert and an operation manual the size of a phone book. "It was a massive rigging job," Strong continues, "but [electrician] Monty Woodard [who was isolated in a separate booth with the console and two 13" color monitors] would draw maps that showed the exact position of every light. All we'd have to do was unfold the map and say, 'Can you bring that one down 10 points and

Nixon's meeting with Mao in China cemented his role as a global politician. Knowing it would be "abbreviated" in editing, Richardson helped retain the brief scene's impact by utilizing multiple camera formats and conflicting focal lengths to force the audience to remember the sequence.

Nixon confronts the hostile press. Vintage lights used as practicals throughout the film provide era-authentic luminance. Despite their age, the fixtures were controlled through Richardson's computerized dimmer system to allow complete control. **Far right:** ***The cinematographer with his handcranked 35mm Mitchell. Stone was initially convinced to use the camera for faux archival footage and flashback scenes, but the Mitchell's unusual characteristics were ultimately exploited beyond those purposes.***

bring that one up 15?' We didn't use all [of the channels] at one time, but they were all filled with dimmer leads running out. If we needed to run another 10K up high, our lead was right there.

"This system obviously saved time. You also save money by not having to put warm gels over the lights; you can dim each of them. Say you put a half CTO on a 10K. Sometimes you still need to put a single or a double on it, take it down a stop or two. Here, you can just do it with the dimmer. So we saved a lot of money in gels.

"The initial system is expensive," Strong admits, "and it's time-consuming to pre-rig. But once it's in place, it simplifies everything. Before you know it, the system has already paid for itself. We even took a smaller version on location, one with maybe 12 to 24 channels."

The dimmer system also facilitated Richardson's noted penchant for harsh illumination on the actors, occasionally achieved with 1200-watt Par cans aimed "straight down," Strong says. "[We used] really hot lights on people, sometimes in a way that would make the tops of their heads almost solar. This hot look is one of Bob's trademarks." Richardson's use of extreme illumination, aimed from a variety of directions, appears frequently throughout *Nixon*, perhaps best exemplified in a scene where Nixon contemplates the death of Robert Kennedy while sitting in his apartment in New York City. "In that instance, I used extremely hard backlight [on Hopkins,]" Richardson recalls, "just a funnel of light that ran about five or six stops over on his edges."

Richardson often found ways to similarly light subjects while on location; for example, he might angle an overhead unit down onto an actor to make it appear that he was standing in either brilliant sunlight, the reflective glare of a mirror or the window of a nearby building.

One of the last scenes shot, and later interspersed throughout the film, was that of Nixon, a tumbler of whiskey in hand, repeatedly playing back his covertly-recorded tapes as if still questioning his own complicity in the Watergate cover-up. "I wanted to create an ambience in that room that was believable but eerie," Richardson recalls, "so I based it on the light from a fireplace, which is really the primary source for the scene. By 'eerie' I mean a light source that was unstable, which I felt was more in keeping with the situation."

To create the firelight, two sequences were programmed into the Lite Palette 90 for four 9-lights. "Each pair would be in a different sequence," Strong explains. "So instead of four lights in the same sequence, you'd have two lights in one program and the other two doing another, which made it much more realistic. You could program the fire to [range between] the highs and lows of the flames. Let's say on a scale of 1 to 10, with zero being the off point, you want the flame to leap to a four, then to a zero, then leap to a seven, then to a two, then to an eight. You can do it that way, see how it looks, and then modify it a little or make it rage."

Only one problem arose in respect to the computerized dimmer system. "It was strictly AC [current,]" Strong reports, "and lights hum when you dim with AC. You may not be able to hear it, but the sound mixer will say, 'Excuse me, but these damn practicals are *singin'*.' So we later got DC dimmers, because DC doesn't hum."

Continuing his plan of interpreting scenes according to their emotional tenor, Richardson went one extremely unusual step further. Regardless of what time was indicated by the script, he would often light the scene as neither night nor day, but as something in between. One example is a scene in which Nixon and his staff are seated on opposing sofas in the Old Executive Office Building. "We bounced a 20K through a window two feet off the carpeting," Strong recalls. "We had the practicals turned on, but it could have been any time of day, with maybe a low sun coming in off the floor. Or it could have been night, with a wash coming in from mercury-vapor lights outside. The effect it created on the actors was hard light from the knees to the waist, and soft light from there up. We called that light the 'carpet burner' because it got so hot that it actually melted the carpet. We had to replace pieces after a while. A 20K off the floor like that is probably creating 250 degrees of heat."

Another scene, in which Nixon visits a contingent of wealthy Texans who offer to finance his 1968 presidential run, had similarly incendiary results.

Recalls Strong, "We hung a 6K HMI Par eight feet off the ground and bounced it straight down off a coffee table that you never saw. That was the light source for the entire room, and it created a very soft underlight.

"We ended up putting very thin plywood on the table because the wood on the table was starting to smoke and catch fire. And every hour and a half the Par would burn out. You can't direct them straight down because they get so hot that the soldered joints just melt. We'd start hearing pieces of the metal falling inside the lamp, and then it would just go out. I think we went through six of them while shooting that sequence."

Richardson's free interpretations of dramatic lighting were sometimes questioned. He notes, "Someone would see a bold light coming through the window and say, 'Wait a minute, the moon doesn't come through a window quite like that.' And I'd say, 'No, it doesn't, but people don't usually act quite like this, either.' Again, the story just required levels of interpretation, and as a result I put it there. Oliver was very receptive."

Most of the time, that is. "Oliver has no hesitation in coming to me if he's concerned," Richardson says with a smile. "He'll say, 'What are you doing? I mean, what is this?' It's his way of saying no. I've seen it a hundred times. I remember walking in once during dailies and he said to me, 'This is a *night* sequence, Bob. Did you read the script? It said night, Bob. *Night*.'"

Such conflict is perhaps expected when a director and cinematographer so brazenly pursue new or unlikely forms of experimentation. And though Stone is always responsive to ideas, there are still times when his focus is more strictly on constructing shots and eliciting performances. It's thus often easier for Richardson to consider alternative ways of shooting a scene.

As it very often happens, Richardson will inquire of Stone, "If we accomplish what we need in a certain amount of time, can we also try something else?" The director will almost always accede, sometimes with very little further discussion.

The addition might consist of shooting parts of a scene in another format, or several formats. One example from *Nixon* is an Oval Office sequence, which was first covered in 35mm color. "I said I'd like to shoot the master in 35mm black-and-white," Richardson recounts, "come down to 16mm black-and-white for certain pivotal shots, and then use 16mm Ektachrome for a couple other pieces of coverage."

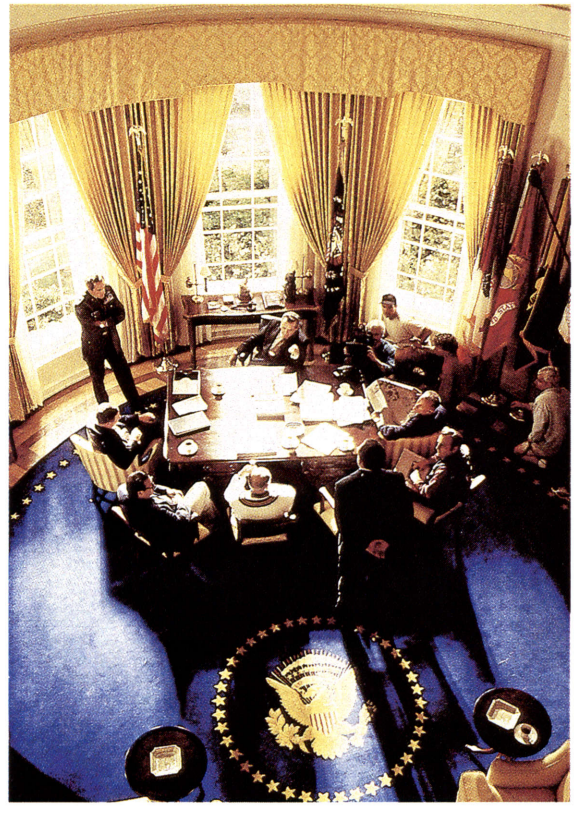
These formats occurred to Richardson for several reasons. "There is a great deal of material in the film that is devoted to the interrelationship between material shot in the Oval Office and stock footage of exterior events," he explains. "I don't think these should be so easily segregated.

"I also learned from *NBK*, and of course *JFK*, that certain stocks provide you with a texture. If you utilize it in a proper way, the texture elicits an emotional response. For instance, a 16mm black-and-white blow-up in the Oval Office, maybe just on a line [of dialogue,] might take you back to an earlier scene or lead you to question something in the scene. Now, I don't necessarily believe that 16mm stock will give you X, X and X, meaning that the stock will give you a universal response. But I *do* believe that if you take that 16mm stock and lay it against a 35mm stock of a different nature, their relationship when juxtaposed will tell you something — if they're used in the appropriate manner. And that's why you do it, to get that interaction."

Adding to the panoply of formats on *Nixon* was footage shot with both a vintage handcranked Cine-Kodak 16mm camera Richardson had received as a gift, and a handcranked 35mm Mitchell, rented for the film from Lloyd's Camera Exchange in Hollywood. "They're both relics," he muses. "The Mitchell is one of the old Charlie Chaplin cameras. They both give you a flicker, a kind of pulse, which is an important part of those cameras if you know how to use it properly. You really don't know exactly how the footage is going to turn out, which is part of the charm. There's a tachometer on the 35mm to assess your frame rate, but not on the 16mm. It would be whatever I ended up moving it to — 24 fps, 3 or 4 fps, 36 or 42 fps. I used both of them quite a bit, determining the proper purpose for each by feel."

Before *Nixon*, Richardson had been contemplating ways of using the antiquated cameras for over a year. "When you first begin to consider such an idea, it's not always necessary to understand exactly what you're going to do with it," he says. "Oliver initially accepted them for the most obvious use, which was for historical footage in the film."

Such scenes included Nixon political rallies in the Forties and Fifties, parts of his youth in California, and newsreel footage of him prosecuting Alger Hiss. "Although handcranked cameras weren't used at many of those events, it was an easy way to create the feeling that this was older footage," Richardson says. "I would attempt to crank at the right speed, but the quality of the lenses would be considered inferior by today's standards — closer to the quality of the lenses that were actually used during those periods."



All the President's men:** In the effort to save time and money,* **Nixon's** ***Oval Office was in fact a set commandeered after the wrap of **The American President.** ***Production designer Victor Kempster modified the existing structure with ceiling panels to allow Stone and Richardson's low-angle approach.***

Whiskey in hand, Nixon erases damning seconds of history. The scene, one of the last shot and interspersed throughout the film's final cut, was shot with multiple lighting schemes to reflect the character's emotional shift from denial to desperation — from glowing firelight to expressionist brilliance.

As with other multi-formatted sequences, incorporation of the handcranked imagery, when used for "texture," would often be finalized in the editing room. "For example, Oliver and [editors] Hank [Corwin] and Brian [Berdan] cut together a Nixon marriage montage and decided it might be better to be on a handcranked, blown-up 16mm shot of a young child that cuts to a shot of an older Nixon courting his wife in a straight 35mm Panavision reproduction. They then set that shot against a wide angle of a car driving along in a landscape that is handcranked 35mm," Richardson describes. "It just depends. When you see the images it tells you how to lay them against each other. It's like writing, choosing the right word."

But Richardson also saw additional, less obvious applications for the handcranked cameras. "As I mentioned, the immediate feel for those cameras belonged to a time period," he says, "but starting out with that allowed the environment for the handcranked footage to open up as something beyond just depicting the historical. Because once you get that far in someone's mind, it can become a creative tool. For me, I was already there, but it's a process of making Oliver comfortable with it, just as it was extremely vital on *JFK* to get Oliver used to shooting at three or six frames per second. It takes a great deal of insight to understand what else you can do with something. And that's one of the great things about working with someone for a very long period time: you end up with a trust that is irreplaceable."

The handcranked cameras thus became a more integral ingredient to the film in terms of textures and also in terms of what Richardson calls "overlays," the overlapping montages depicting momentous incidents or condensed time periods that he estimates comprise about 20 percent of the film. One such sequence involves Nixon's historic visit to the People's Republic of China to meet Chairman Mao Tse-Tung, which is usually regarded as the President's supreme foreign policy achievement. The approach to the scene evolved on the set.

"We devoted a lot of 35mm time in presenting this scene," Richardson says. "I asked Oliver if 35 would be used for all of it. He said, 'Yes, but that there's a possibility that we might have to abbreviate it.' Oliver is always very honest with me. But okay, if anything has to be abbreviated in the editing room, we still want to present this in such a way that when people see it, they remember it. It has to be more than just men standing against a wall shaking

hands. It becomes more than that. It becomes emblematic.

"So we decided to break it down with the use of the handcranked camera, which of course provides you with an entirely different look. We shot the initial meeting of Nixon, Kissinger, Mao and [Chinese Prime Minister] Chou En-Lai with the 35mm handcranked because I thought it had a stronger visual feel [than the 16mm,] kind of a newsreel flavor.

"After that we went into parts of the conversation itself and shot them with both cameras, first [with Panavision] in straight 35mm on a 40mm lens with very low angles — bodies towering, ceilings shown as much as possible, or at least a sense of greater depth to denote power. It became more impressionistic — not the entire conversation, but moments between the individuals.

"The reason I chose the handcranked approach was to make the sequence more recognizable. I also did it to make the scene a bit odder, to contrast the wider angles — looking up from below Mao as he towers above you, or below Kissinger or Nixon — with a horrible light source. Using the 40mm lens was odd to begin with, as opposed to a more standard 100mm over-the-shoulder look, which would have been another approach to the sequence.

"But what occurs is that you go one step stranger. You're going for that power feel, and then you go with the handcranked material, which makes the shots just before it, the low angles, feel as if they're normal. It switches the nature of the beast all the way. Things become relative, producing a whole different register."

The scene is further leavened with superimpositions of cloud formations, Chinese calligraphy and images of Mao. "There are many layers of material in that sequence," Richardson says. "What the characters say is very important, so the layers aren't meant to distance you. They point you [in the right direction.]"

In another ingenious use of vintage equipment, 35-year-old Leko and Klieg lights, which no one on the set had ever seen before, were used as practicals in a recreation of the famous Kennedy-Nixon television debates, offering authentic illumination to the scene. Original footage of Hopkins, digitally matted into archival footage featuring the actual John F. Kennedy, was shot at Video Image in Culver City. The lights were also successfully rigged up to work with Richardson's computerized dimmer system.

But in addition to these creative successes, the Stone-Richardson collaboration on *Nixon* also had its stress points. To save money, all the dailies after the first week were transferred directly from the negative to 1" video with ¾" dubs and digitized to be viewed exclusively on the 16" monitors of the Avid non-linear electronic editing system.

Stone, it will be recalled, had suggested a moody ambience via a dependence on shadows and darkness. While Richardson did

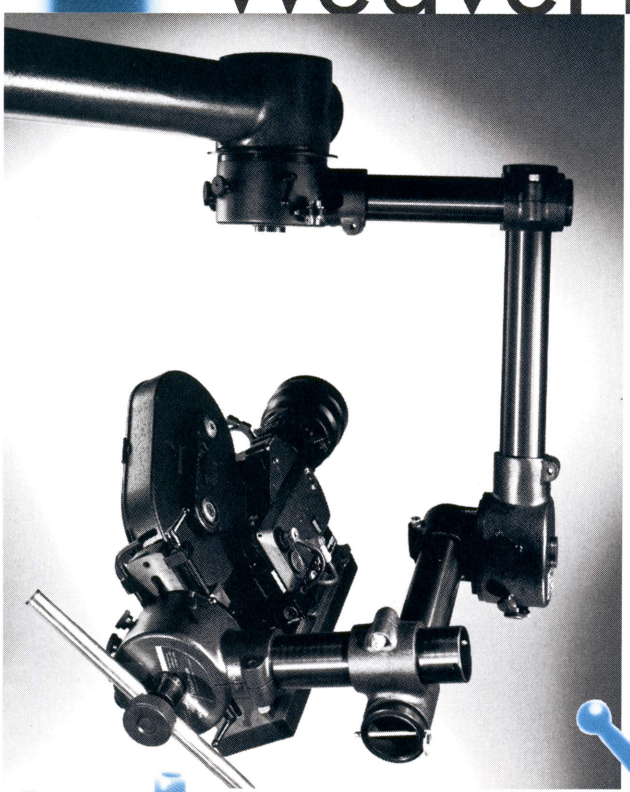
Pan, tilt and roll all around the camera's center of gravity with your W/S 3-Axis Head. Its tube frame design offers the most rigid and versatile configuration possible.

Weaver Steadman

CAMERA SUPPORT SYSTEMS

3-Axis Head

Weaver/Steadman, Inc.
1646 20th Street
Santa Monica CA 90404
310.829.3296
310.828.5935 fax



not oppose the idea, he shot not so much with low levels of illumination as with exposures that could be printed down to appear dark. During dailies, Stone protested that the imagery was too bright. Richardson countered that what Stone was seeing on the video monitor did not accurately represent what he'd shot, regardless of what he intended to do by later printing it down. Confusing the situation was that, until recently, no conforming standard had been developed for the conversion of film timing formulas to video or vice-versa (see related article on Yuri Neyman's gray scale/color standard on page 85).

"You can crush the hell out of video and still see detail that doesn't exist in film," Richardson explains. "Video renders more information in the blacks than film does. It has more access to the negative. There is no direct relationship. If you print it with chemicals it's an entirely different world. It's shade in my world and sunlight in the other. You really can't parallel it with stops, because luminance range with video is so much different than a chemical interpretation."

Richardson stopped attending dailies after two weeks. But he kept hearing the same thing: "The images are too bright." Others beside Stone seemed to hold him responsible. "Why is it like this? It must be Richardson." He was sometimes hearing that the color was off, too. "I was just barraged," the cinematographer reflects. "And the end result was that I began to reconsider my work. And that's where the error came in about halfway through [the project]; it wasn't that I changed my light patterns, but I started to work at a lower level [of exposure]. My printing lights started to drop. I began to end up at 15, 12. I was getting so thin [on the negative] that I wasn't sure I was going to be able to save it.

"It happens in a bedroom scene with Nixon and his wife arguing in a hotel room. [A viewer might] never think it's too thin, but it's too thin by my standards. I like to print in the 40s, not in the 20s. For me, it's a catastrophe to be in the 20s because I don't know where the opticals are going and I don't want to provide anything that isn't strong enough to be able to handle that degeneration. I like a grainless film where I can get it. If I want grain, I can introduce it or I can shoot it. But when I want it clean, I want it like silk."

> "I like a grainless film where I can get it. If I want grain, I can introduce it or I can shoot it. But when I want it clean, I want it like silk."
> — Robert Richardson, ASC

Richardson returned to his original lighting after about two days. "After that we just left it alone," he recalls. "I just started shooting as I had initially. I wasn't going any further down that road."

Regarding the dailies episode, Stone maintains, "It was a problem, but we saved a couple of hundred thousand dollars doing it that way. Bob said we'd pay the price later, because on a rushed schedule [*Nixon* was completed within days of its deadline] we'd get surprises in the workprint. And it was pretty shocking. In fact, it was devastating and depressing, screening the workprint for the first time."

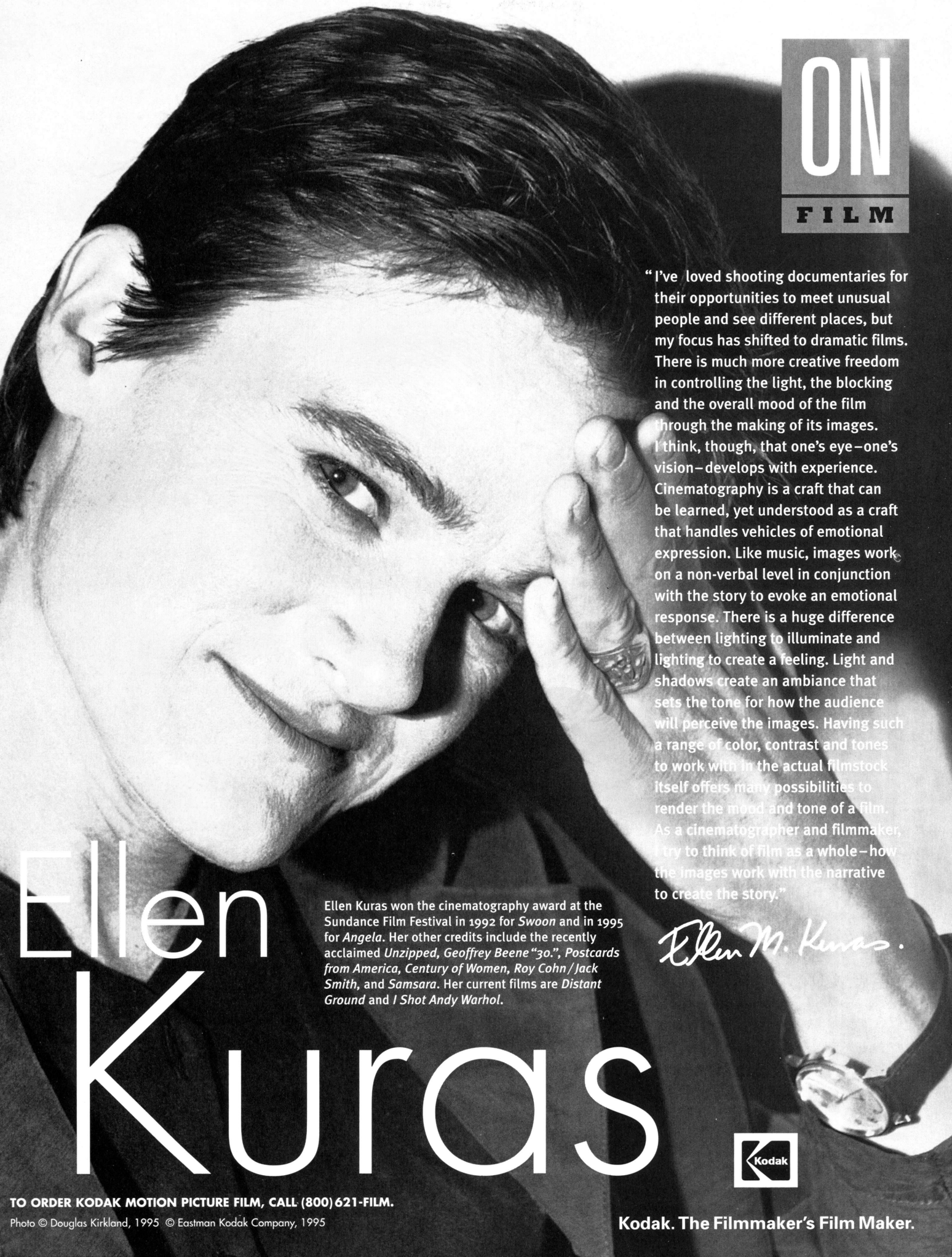
After extensive timing at Technicolor — which was inevitable, considering the more than 3,500 shots, multiple formats, 2,000 opticals and archival footage printed from often highly-blemished reversal stock or transferred from video — both Stone and Richardson were extremely pleased with the release print. The cinematographer nonetheless categorically advises against video dailies: "It's an entirely wrong way to go about making movies."

Richardson has closely supervised the timing of each of his films. One thing that became evident to him during the timing of *Nixon* were permutations in the blacks of the current Kodak print stocks. He describes, "In one scene, as Nixon walks away from the sole source of light, his suit starts to glow rather than falling off into total black; it becomes almost iridescent as he enters the black. It tends to go either blue or red, depending on whatever color you're putting into it. If you saw it onscreen you would never notice it, unless you knew the exact shot, but it's definitely a characteristic of the print stock."

Richardson also found that he was drawn more to red and magenta because both seem to better mask the grain layer in timing. "I feel it's a better image when it has more of those colors in it," he opines, "whereas prior to this I probably wouldn't have done that."

He also had initial difficulty with black-and-white material printed on the same color stock. "It came out as extraordinarily high-contrast," Richardson laments, "because my black-and-white is well-layered in grays, and all of a sudden I'm dealing with a fraction of the number of grays [compared to what] I was dealing with in the original shooting. Of course, it's another generation down by the time they put it on the color stock, but I couldn't understand the complete loss. They would use different speeds for me [at the lab,] and the slower speeds seemed to give a greater reproduction in terms of grain structure, but I was getting a higher level of contrast because my whites were blowing. So we were running into problems there."

Richardson singles out Technicolor timer Bob Kaiser for his superb, devoted work in attending to the many corrections and adjustments. The cinematographer feels that the lab is still a largely unexplored option for creating imagery. "Oliver and I are trying to discover what can be done in post work with film stocks to produce new looks," he says. "I believe we do a lot of work in the lab that is truly fascinating and adds textures. I don't feel that texture always has to be something I shoot on locations with the camera. There are other ways to achieve different looks for a film." ☙


ON
FILM
"I've loved shooting documentaries for their opportunities to meet unusual people and see different places, but my focus has shifted to dramatic films. There is much more creative freedom in controlling the light, the blocking and the overall mood of the film through the making of its images. I think, though, that one's eye–one's vision–develops with experience. Cinematography is a craft that can be learned, yet understood as a craft that handles vehicles of emotional expression. Like music, images work on a non-verbal level in conjunction with the story to evoke an emotional response. There is a huge difference between lighting to illuminate and lighting to create a feeling. Light and shadows create an ambiance that sets the tone for how the audience will perceive the images. Having such a range of color, contrast and tones to work with in the actual filmstock itself offers many possibilities to render the mood and tone of a film. As a cinematographer and filmmaker, I try to think of film as a whole–how the images work with the narrative to create the story."
Ellen M. Kuras.
Ellen Kuras won the cinematography award at the Sundance Film Festival in 1992 for *Swoon* and in 1995 for *Angela*. Her other credits include the recently acclaimed *Unzipped, Geoffrey Beene "30.", Postcards from America, Century of Women, Roy Cohn/Jack Smith,* and *Samsara*. Her current films are *Distant Ground* and *I Shot Andy Warhol*.
Ellen Kuras
Kodak
TO ORDER KODAK MOTION PICTURE FILM, CALL (800) 621-FILM.
Photo © Douglas Kirkland, 1995 © Eastman Kodak Company, 1995
Kodak. The Filmmaker's Film Maker.

Henri Alekan: The Doyen of French Cinematography

Revered cinematographer will receive the International Award at the 10th Annual ASC Awards.

by Benjamin Bergery

MUCH LIKE THE CLASSIC IMAGES HE has created for the cinema, Henri Alekan is ageless. During a recent interview in his Parisian house, Alekan was gracious, eloquent, humble and didn't look a day over 60. It's hard to believe that the energetic man sitting across the kitchen table is in his eighties, and that his distinguished career in cinematography spans more than six decades of filmmaking. Indeed, Alekan's life is intimately intertwined with the evolution of European cinematography over the past half-century. Here is a cinematographer who has worked with G.W. Pabst, Max Ophuls, Jean Cocteau, Abel Gance, Marcel Carn, Ren Clement, Yves Allegret, Julien Duvivier, William Wyler, Joseph Losey, Terence Young, Alain Robbe-Grillet and Wim Wenders. This is the same man who shot *Beauty and the Beast* in 1946 and *Wings of Desire* in 1988.

The cover of Alekan's heavily-illustrated and invaluable tome on photography. Though available only in French, its priceless collection of stills and illustrations makes it an essential volume.

It seems natural that Alekan's collection of cinematography awards should be crowned by the ASC's 1995 International Award, which will be presented to him on February 25 at the Century Plaza Hotel in Los Angeles. He is the fourth director of photography to receive the honor, following Freddie Young, BSC, Jack Cardiff, BSC and Gabriel Figueroa.

In France, Alekan is something of an institution. He participated in the creation of the IDHEC film school in Paris, as well as the French Cinematheque. His film work is informed by a long reflection on lighting and shadow, culminating in the superb volume *Des Lumiéres et des Ombres* (*About Lights and Shadows*) published in 1979, and republished in an expanded edition in 1991. At the moment, Alekan's book is unfortunately available only in French, but the magnificent illustrations that marry film and painting are worth perusing even without the eloquent text.

Alekan was born in 1909 in the Montmartre neighborhood of Paris, an area known as a center for artists, and grew up not far from Renoir's atelier. Some 80 years later, the ever-youthful cinematographer has been creating architectural lighting installations for his old neighborhood, as part of a project for the City of Lights. In one setting, Alekan has installed dozens of tiny fiberglass lights in the quaint steps of the rue Caulaincourt. The small points of light in the vertical surfaces evoke constellations of the summer sky to the passerby. The effect is beautiful and poetic, vintage Alekan. He explains that his motive is to improve upon the "banality" of city lighting by adding a new note, one that will hopefully "incite people to stroll at night."

Sixty years ago, Alekan and his brother started off as puppeteers, in the grand tradition of French guignol. "My brother and I were 15 and 16," reminisces Alekan, "and we were completely taken by this form of contact with an audience of children. We wrote two or three plays for puppets, devised a portable guignol stage and put ourselves in business doing shows in schools or at people's houses. These shows were the only moment when I lost my timidity. Behind the puppet facade there was a small hole through which you could look at the public without being seen. Therefore I could express myself without shyness, and I found that marvelous." Soon, the timid but talented Alekan would place himself behind the camera.

One night, Alekan happened upon a harbor where a big American film production, *Venus*, was being shot. Then and there, he decided to pursue a career in motion pictures. After many attempts, Alekan finally broke into the film business by becoming third assistant cameraman at the Billancourt Studio, the premiere studio of its day. His duties included sweeping the floor and developing short test strips of negatives for the cinematographer to look at while

Photos from "Des Lumières et des Ombres," Librairie du Collectionneur

Beauty (Josette Day) lingers in a moment of Alekan's sunlight in* La Belle et la Bête *(1946). Directed by surrealist Jean Cocteau, the film's visual style was inspired by the paintings of Vermeer and other 17th-century artists.

shooting.

A German *émigré* cameraman named Eugene Shuftan became Alekan's mentor. Shuftan had worked on the special effects of *Metropolis*, inventing a plate process for miniatures that still bears his name. Alekan worked as his assistant and operator and remains grateful to his teacher, to whom he dedicated his book. "Shuftan was an expressionist," recalls Alekan, "and I profited greatly from the magnificent lessons in lighting created by an artist. He would say, 'Look here, I'm not doing a naturalistic lighting; I'm doing lighting as I feel it, emotional lighting.'"

The Billancourt Studio started out as a huge empty space, "like a railroad station," that housed concurrent silent film productions. Lighting was initially provided by a glass ceiling, which could be softened as needed by curtains of diffusion. In the mid-1920s, the glass ceilings were painted black with the introduction of artificial lighting by means of arcs, mercury-vapor lamps, and, in 1928, the first incandescent bulbs.

Alekan recalls that the atmosphere of the silent stages was easygoing but chaotic. "There was a different atmosphere on silent films, very friendly and relaxed, but also, ironically, not very silent. The director was constantly talking to the actors during the takes, and carpenters were hammering away on the sets in the background." One exception to this filmmaking din was provided by Abel Gance, the visionary director of the three-screen epic *Napoleon*. Gance arranged to have music played on his sets, to create an emotional feeling for his actors' movements.

After serving a stint in the military, Alekan returned in 1931 to find the studios transformed by the new sound technology. For the young man the creative atmosphere "had become very organized, almost industrial." Alekan witnessed many difficult moments created by the microphone boom moving above the actors' heads. Naturally, the camera framing had to accommodate this intrusion from above, but a far greater problem was the moving boom shadow. Alekan recalls that very few kind words were exchanged between the camera and sound crews during the early sound films. "There was a great disruption with the advent of sound. In the beginning the sound people were very much in the way; everything was centered around the microphone. Cinematographers had been used to a great freedom in lighting and suddenly, one had to worry about the shadows of microphones moving above the actors' heads. There were terrible problems. In general, cinematographers were on very bad terms with sound technicians. They were enemies."

For Alekan, the introduction of the microphone boom was also instrumental in the development of new tools to better control the cinematographer's lights from above. The Fresnel lens was introduced by Cremer, who adapted lights used for railroad signals to the world of cinema. These frontal lenses enabled a more controlled and directional light. Cremer also invented the French Flag, a piece of metal on a flexible arm that is standard issue today. Other innovations included the American Fill

Alekan adjusts his lighting on actress Vivien Leigh during the production of* Anna Karenina *(1947) at Shepperton Studios. He deems it "one of the most beautiful films I have made in my career."

Ring, a funnel placed in front of the light, which later evolved into what is sometimes referred to as a Cronie Cone, or, in a more recent variation, as the Chimera.

Alekan's career was interrupted by World War II and the German occupation of France. During the war years, Alekan and his brother, Pierre, formed a Resistance group called July 14, which was based in southern France. The group helped people on the run from the Germans by providing shelter, false papers and meal tickets. The cinematographer also secretly filmed German beachfront fortifications while making a documentary on the railroad. At one point during the war, Pierre had a very close call: he was captured by the Gestapo and tortured, but managed to escape from the hotel the Germans were using as headquarters by prying apart the bars on a window with a piece of wood. He climbed over the wall and landed among a group of French schoolchildren, who gathered around him as if he were their teacher and escorted him past the guard post and through narrow streets to safety. The Alekan brothers continued their Resistance work until the end of the war. The cinematographer received several medals for his wartime activities, and was also awarded the prestigious Legion of Honor.

After the war, Alekan teamed with director René Clement to shoot *La Bataille du Rail (Battle of the Railroad)*, a film about the French railroad workers' Resistance movement. Shot in documentary fashion with a cast of railroad workers and almost no lighting, the dramatic film has a gritty quality that presages the neo-realism of the post-war era. Its simple beauty endures to this day.

Alekan's subsequent encounter with Jean Cocteau was a turning point in his career. Cocteau was a true Renaissance man: poet, playwright, novelist, painter and cinema auteur. A constant innovator and seminal figure of the *avant-garde*, Cocteau was the Oscar Wilde of the Parisian Thirties. The young cinematographer remembers that he was awed by this multi-talented social celebrity. "I was literally frozen with fear. In my first meetings with Cocteau, he strove to overcome my natural shyness. Cocteau said to me, 'Have a seat, Alekan, we will leaf through some art books, and you shall see how Gustave Doré illustrated fairy tales.' Cocteau then asked me to go to the museums to look at Vermeer and the Seventeenth Century painters. He told me that I should get inspired by the lighting of these masters, because that is what he wanted for his upcoming film, *La Belle et la Bête (Beauty and the Beast)*. [That experience] was absolutely wonderful. It was the first time in my life that a director talked to me about painting."

At Cocteau's urging, Alekan went back to the museums. "I knew art, but because I had not had the occasion to deepen my understanding of lighting, I had wandered through museums in a superficial way. And now, finally, thanks to my *métier*, I was forced to analyze how painters, and Renaissance painters in particular, had worked with lighting to create an emotion. I realized that cinematography is the only *métier* where you manipulate light in the real world. Allow me to insist upon that: it's extraordinary."

The cinematographer drew inspiration from Rembrandt, Vermeer and Georges de la Tour. "Il Caravaggio," adds Alekan, "was a great teacher for me. He painted by making a tiny hole in black paper over a window. He was working with a small, and therefore very directional, light source. I have often used this approach: a very directional primary light source, accompanied by secondary sources that are the offshoots from the primary, as well as reflections of the primary on surfaces, like walls."

Cocteau's preparation for his adaptation of *Beauty and the Beast* began more than a year before shooting. Alekan notes that Cocteau's set designer, Christian Berard, was also inspired by Gustave Doré in the creation of his sets. Some decors, like the moonlit garden staircase, are almost identical to Doré's drawings.

The result of Alekan's collaboration with Cocteau is one of the masterpieces of French cinema. The beauty of the film owes much to the magical combination of Cocteau's poetry of film and Alekan's painting with light. The film is a succession of tableaus of exquisite tonality and contrast, an homage to both Vermeer and Doré that remains a paradigm of black-and-white cinematography.

One of the themes of Alekan's book is that shadows create drama. He explains that "everything that is shadow, penumbra and darkness suggests a dramatization of the subject. I need no further proof of this than the immense work of great painters like Rembrandt, who worked so much in shadows." Conversely, Alekan

Still waiting for your motor to hit the focus mark? And when it finally stops it's somewhere else... When somewhere else isn't good enough, get the FI+Z Power Tools.

Wired or wireless, now it's your move.

power tools.

microwave transmitter

digital motor

FI+Z hand unit

motor driver + optional receiver

complete multiplexer/lens control/camera base for power pod

1659 Eleventh Street Suite 100

Santa Monca, California 90404

tel 310 453.1852 fax 310 453.5672

reminds us that the absence of shadows is used to evoke lightness and comedy. Another key issue in Alekan's book is the impact of diffused light. The author points out that one of the functions of shadows is to define time by their length and position. Conversely, for Alekan, diffuse lighting lacks temporal definition; the absence of shadows creates a non-defined, less dramatic universe.

In one shot in *Beauty and the Beast*, the father of the tale's heroine approaches the door to the beast's castle. Alekan suggested to Cocteau that the passage of time be evoked by the actor's shadow. The cinematographer's inventive solution was to put a light on a crane that was lowered as the actor approached the door, creating a magical transition, all in one shot, from a small midday shadow at the father's feet to a huge shadow that climbs the door. Like many cinematographers, Alekan sometimes feels "betrayed by the editor," and this is one instance were he would have liked the cut to happen just a little later. The shot's poetic conclusion implied that the door seemed to open under the weight of the huge final shadow.

The year 1946 was a milestone for Alekan. It is a tribute to the range of the cinematographer's talent that he could shoot such antipodal films as *Beauty and the Beast* and *Battle of the Railroad* in the same 12-month span. When queried about this contrast, Alekan defines his profession. "I had a certain joy in trying to show that the *métier* of director of photography is that of a creator of images that can't be similar for every subject. Rather, the lighting, composition, framing and very structure of these images must be linked to the story. The essence of this wonderful *métier* must not be to please yourself, but rather to express the subject matter by means of the plastic art of cinematography without the convenient repetition of routine tricks. Routine is the exact word for it; it's not a matter of routine, but of trying to invent a style for every film."

The following year, Alekan spent many Sundays reading and re-reading Tolstoy's *Anna Karenina*, imbuing himself with the novel's ambience as he prepared to spend nine months shooting the epic film version, directed by Julien Duvivier and starring Vivien Leigh in the title role. Alekan confesses that "in my opinion, it's one of the most beautiful films I have made in my career. It may well be my favorite film."

Anna Karenina is full of lighting nuance, as in the final scene where Tolstoy's shattered heroine throws herself under a train. The exterior train station is shot at dusk, with clouds of steam billowing from the locomotives. The imagery is a stunning harmony of shadows and penumbra, and every tone, from black to white, is masterfully rendered. Leigh's face vacillates on the edge of darkness, seamlessly integrated with a rear-screen projection. Alekan adds that it was essential that the director allow him to decide the exact moment to shoot the dusk exterior.

One of the only American features in Alekan's filmography is *Roman Holiday*, starring Audrey Hepburn and Gregory Peck. In the summer of 1952, Alekan was surprised to receive a phone call asking him if he was available to start shooting a William Wyler film in Rome the next day: he was. Upon his arrival in Rome he was received by the producer, who asked, "Are you Alekan?" "I am," the cinematographer answered. Looking disappointed, the producer replied, "I thought you were old."

The multi-dimensional nature of the world is illustrated in this single shot of a bunker below the streets of Berlin from the lyrical* Wings of Desire *(1988), Alekan's last major production.

Alekan learned that he had been called in to replace Franz Planer, whom Alekan salutes as "a great American cinematographer." After a violent argument with Wyler two weeks into shooting, Planer had left the movie. With a twinkle in his eye, Alekan offers his mirthful opinion that the desperate production simply went through a list of nearby cinematographers, and that he got the job because they started with the letter A.

Alekan's approach to the elegant romantic comedy was upbeat, and "undramatic," high-key lighting. "My point of view was to avoid succumbing to an aestheticism of black-and-white values, or excessive compositions. A comedy doesn't require lighting effects. You have to keep it simple." The film included many historic locations, and it was a tall order to flood the palazzos from the outside. The cinematographer was surprised to discover that Wyler shot every angle with three cameras, "as close as possible to the same axis, with a wide, medium and close shot. That was Wyler's technique, and bully for the editor."

Alekan was proud to share the subsequent Academy Award nomination for *Roman Holiday*'s cinematography with Franz Planer, but he reflects that "I have often wondered why the films you work the hardest on don't get prizes, and those that seem apparently the simplest get recompensed."

In 1959, Alekan shot *Austerlitz* with legendary silent film director Abel Gance in Yugoslavia. The epic Napoleonic war film reflected Gance's continuing obsession with Bonaparte. Gance was in his seventies and too frail to shoot in the harsh Yugoslavian winter, so the entire film was shot in a Zagreb convention center that had been transformed into a studio. From Alekan's recollections, we can surmise that Abel Gance had no reason to envy Cecil B. De Mille. Gance orchestrated massive cavalry charges during the day; at night, crews remodeled tons of earth with small bulldozers to create hills and plains for the next day's battle. Alekan recounts that in order to light the daytime battle scenes, he had his electrician order 10,000 bulbs from a local factory. One scene required 36,000 amperes of current, enough to light a small city. It was during this shoot that Alekan met his wife and lifetime partner, Nada.

Alekan is ambivalent about the New Wave movement of the Sixties, a time when many French filmmakers sought to break out of the soundstage and use simple flat lighting that was sometimes known as *Lumiére Anglaise* (English Lighting). He explains that the name came, ironically, from English fashion photographers "lighting with flashes and umbrellas. However, fashion photography comes from a completely different concept than cinema. They weren't trying to model with lights, but to light models."

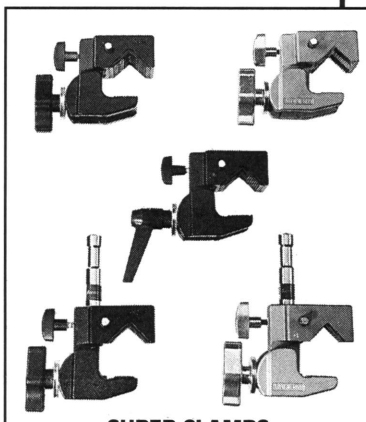
Alekan felt separated from a filmmaking movement that, in his eyes, denied his deep-felt belief in the dramatic role that lighting should play. He recalls that "people in production were saying, 'Ah, but Alekan isn't up to this new method of lighting.' And they were partly right! My view is that you have to break the banality of naturalism. We get naturalism in our everyday lives. Artists are made to invent something else."

A new generation of filmmakers sought out Alekan to shoot their visions of the world. The novelist-turned-filmmaker Alain Robbe-Grillet asked Alekan to shoot *La Belle Captive*, partly inspired by the paintings of Magritte. Director Raoul Ruiz "was always happy when I would propose something bizarre."

Alekan was in Portugal shooting a film directed by Ruiz when a strange German visitor announced that, as soon as the filming ended, he would like to rehire everyone on the cast and crew to shoot another feature, titled *The State of Things*. The stranger turned out to be director Wim Wenders; after making his proclamation, Wenders headed America for ten days to get funding for his unusual project. Alekan recalls that, although he found Wenders' proposal fascinating, he didn't for a moment believe the film would happen. It did.

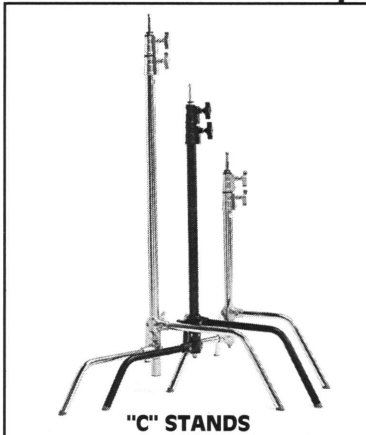
Alekan shot part of *The State of Things* in the United States.

Avenger



SUPER CLAMPS

Avenger



"C" STANDS

Avenger

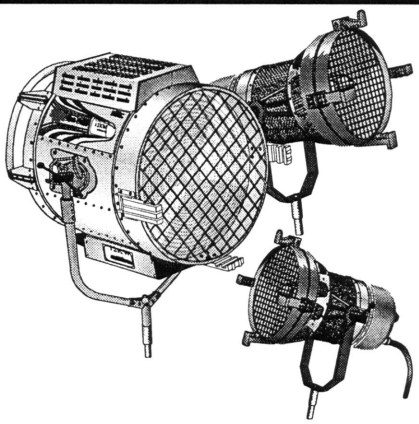
ADJUSTABLE ARMS

For a FREE full line color brochure, see your authorized Bogen/Cine Dealer or contact:

bogen cine

565 E. Crescent Ave., Ramsey, NJ 07446
Phone: (201) 236-0077; FAX: (201) 818-9177

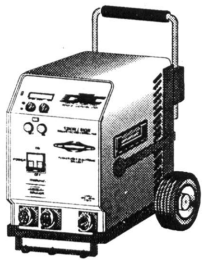
SILVER BULLETS!



The same innovative ***CMC*** engineering which introduced the first 12K HMI to the motion picture industry combined with the latest advances in lighting technology have created the most complete and powerful line of HMI SINGLE-ENDED LIGHTING SYSTEMS in the world!

200W-575W-2500W-4KW-6KW

And more...



ELECTRONIC FLICKER-FREE WORLD BALLASTS: Dual Usage, Power Factor Correction, Light Weight Construction and Proven Reliability!

CALL NOW FOR MORE DETAILS AND PRICE INFORMATION

CINEMILLS CORPORATION
3500 WEST MAGNOLIA BOULEVARD
(818) 843-4560 FAX (818) 843-7834
BURBANK, CALIFORNIA
In California: 1 (800) 692-6700
Nationally: 1 (800) 325-7674

One memorable scene takes place inside a camping vehicle as it motors through the streets of Los Angeles at night. Wenders had assumed that the sequence would be shot with rear-screen projection to simulate the passing streets outside the windows; the director was delighted when Alekan proposed that they outfit the exterior of the camper with lights, drive around, and shoot. The cinematographer explains that each light was on a dimmer, and that he and his electrician would vary the intensity to mimic the passing streetlights. "It was a circus," recalls Alekan with glee, "driving around Hollywood with this monstrous vehicle with lights hanging all over it."

Alekan's next collaboration with Wenders was the stunning *Wings of Desire*, a deeply poetic and original film about an angel who becomes a human. Wenders proposed that angels see in black-and-white and humans in color. It's hard to imagine a better challenge for Henri Alekan. The resulting blend of monochrome and color artistry earned Alekan best cinematography awards from both the National Society of Film Critics and the Los Angeles Film Critics Association.

Wings of Desire was Alekan's last major film, and represents the culmination of his obsession with the dramatic power of light and shadow. But Alekan has never stopped working or thinking. His other projects since *Wings* include a film on the sculptures of Auguste Rodin. It is hard to think of another director of photography who has so consistently and successfully explored the relationship between the traditional visual arts — especially painting — and cinematography.

The ever-youthful Alekan has also served as a mentor for several generations of young cinematographers. His advice to those starting out reflects his lifelong love of art. "The most important thing is to look at what the masters of the past have done for us. Naturally that includes cinema, but most of all, I mean going to museums. It's an absolutely wonderful experience to take a walk through the art of centuries past, to see art by men who saw nature with the same eyes we have, but also with feelings and sensibilities that allowed them to transpose nature onto the painted canvas. I believe that is what you need, to analyze how artists have succeeded in moving us by painting light."

Alekan fears for a future cinema constrained by time and money. He regrets what he sees as an ever-increasing emphasis on efficiency. "If you hurry the cinematographer," he warns, "you don't leave him time to dream. When I was starting out I would often walk around on the set before the shoot, to try and impregnate myself with the decor and to understand what was happening in the script. It's really an extraordinary phenomenon, to find yourself in a dark soundstage, trying to imagine what you're going to do in the universe of this black cube."

Despite his concerns, Alekan is characteristically optimistic about the future promise of cinematography. "I often say half-jokingly to audiences, and it does surprise people, that I think that color film doesn't exist. [They always say,] 'What do you mean, it doesn't exist? We see films in color all the time.' Yes, but my point of view is that, as far as the art of color is concerned, cinema is way behind painting. One day there will be filmmakers who will have a real view of color. They will express themselves cinematographically through color, and not merely in color. This concept isn't accepted yet. What I mean is that there must be creative artists, directors, who have the eye of a painter. Until then, color cinema does not really exist.

"I would say that black-and-white cinema has become highly perfected," he adds. "I think that will happen to color. That is not to say that we should eliminate the naturalistic expression of color, taking color as it exists in nature. But what I'm waiting for is inventing in color. *One From The Heart* [by director Francis Coppola and cinematographer Vittorio Storaro, ASC] is a great attempt at expression in color, but it's an exception, and doubtless one can go much further."

The State of Independents

AC offers an array of creative and enthusiastic filmmakers doing it their own way—on a budget.

SINCE THE BREAKTHROUGH SUCCESS OF *sex, lies and videotape* in 1989, the Hollywood establishment has finally come to fully recognize the potential of an alternate domestic cinema recently marked by such diverse pictures as *Leaving Las Vegas*, *El Mariachi*, *The Secret of Roan Inish*, *Living in Oblivion*, *Safe*, *Kids*, *Clerks* and *The Brothers McMullen*. After years of indifference, independent filmmaking is suddenly the rage, with some publicists actively touting the austerity of each subsequent release while the local multiplexes battle art houses for their share of the expanding market.

Yet as the studios set up their own divergent film divisions and scour festivals such as Sundance and Telluride for talent and titles, several once-small production and distribution companies have been absorbed by large corporations. The nature of the "independent" is in flux. Can a picture still be considered such while financed and distributed by a multinational conglomerate?

Of course. Because while minimal investment may maximize profits for distributors, the harsh financial conditions under which these films are made are a powerful catalyst for creativity and innovation. The result is their departure from the norm in terms of story, character and visualization, the real reasons why filmgoers avidly seek out such pictures.

In turn, expanding public interest has simultaneously spurred the renegade filmmakers who have little in their favor aside from determination and the desire to tell a story visually. Many have been making shorts and micro-budget features for years on Super 8, video and 16mm — that is what they *do* — but they may now also have a receptive audience.

Photo by John Hazlett, courtesy of Burns Film/Red Devil Films

***Writer/director Gary Burns oversees his minimal crew, led by cinematographer Patrick McLaughlin (wielding their Arri SRI), while covertly shooting* The Suburbanators.**

In response to this increasing interest in grass-roots filmmaking, our March issue offers a variety of articles examining the independent aesthetic. Throughout the following special section (pp. 54-78), this edition of *AC* offers encouraging examples of filmmakers who have discovered that ingenuity and determination — those classic but oft-forgotten industry virtues — are often a more than adequate substitute for a well-padded production budget. —*D.E. Williams*

An Economy of Sarcasm

Writer/director Gary Burns and cinematographer Patrick McLaughlin target teen angst and small-town monotony in their wry comedy *The Suburbanators*.

by David E. Williams

SHOT IN THE WESTERN CANADIAN city of Calgary on 16mm for less than $30,000, *The Suburbanators* is a dryly humorous look at life within an anonymous neighborhood photographed by Patrick McLaughlin for writer/director Gary Burns. After making its debut at the Toronto Film Festival, the picture was recently invited to screen at Sundance.

McLaughlin initially became interested in cinematography after a long-held fascination with still photography. After gaining experience at local television stations, he applied to the motion picture production department at Concordia University in Montreal. There he met Burns and shot several shorts for the filmmaker. Following graduation, the cinematographer worked freelance in Calgary while training in the camera department with IATSE Local 669.

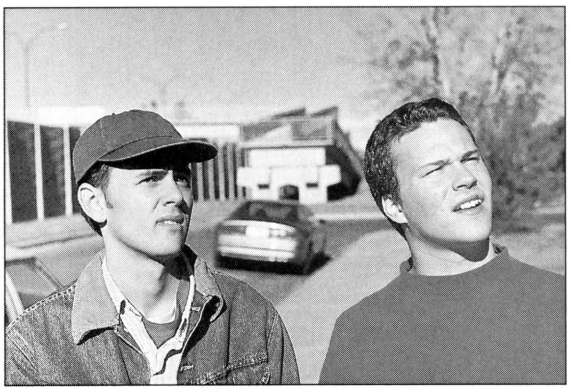


Photo by John Hazlett, courtesy of Burns Film/Red Devil Films

Al and Bob seek escape from their suburban wasteland. With its warmth timed out, 7245 gave the filmmakers the "bleak" look they desired.

McLaughlin also served as an assistant to the recently-deceased Hugh K. Gagnier, ASC on an independent feature shot in Canada. "It was a very difficult shoot because of the budget, but I learned a lot from him about both cinematography and professionalism," the cameraman relates.

Pleased by their prior collaborations, Burns contacted McLaughlin to photograph *The Suburbanators*. Explains the cinematographer, "It follows the same patterns as our previous shorts, *Happy Valley* and *Beerland*, which were sarcastic comedies about middle-class guys flitting around the suburbs."

No real story curve exists in *The Suburbanators*, but the tract-home and shopping-mall locations and culture-deprived characters provide a target-rich landscape for Burns' satiric senibilities. "Basically, I spent 10 years doing nothing in the suburbs," recalls the 35-year-old filmmaker of his youth. "We just drove around and drank beer." And it was this "non-experience" that inspired many of the film's funniest moments as we encounter seven young men, examined in three intertwining yet separate segments: Al and Bob, going through the mundane chore of getting a haircut before heading off to see their local drug dealer; Carl and Eric, also off to purchase a fresh stash after inadvertently insulting a girl they'd intended to flirt with; and Kareem, Salah and Roger, Arab musicians with only a nominal command of English making their way to the same haunts.

Regarding the "action" driving the film, Burns muses, "Young guys looking for dope can be amusing at times, but, as in real life, it is a banal pursuit. The film is, in actuality, anti-drama."

This minimalist approach carried over to the rest of the production, as McLaughlin explains, "The composition and lighting needed a neutral look, to reflect the generic subjects and locations. We didn't want to slap the viewers into feeling certain things about the characters with a specific aesthetic.

"Fortunately, our film doesn't rely on an extravagant, big-budget look. And I think that's a trap that a lot of low-budget filmmakers fall into, trying to make a 16mm feature that looks like *Blade Runner* for $70,000. So there's no movement or lighting in *The Suburbanators* for its own sake."

Kick-started by a grant of $20,000 from the Canadian Film Council, the picture was completed over 35 shooting days under the watchful eye of producer John Hazlett — who also covered as second unit cinematographer and stand-in sound recordist. Admits McLaughlin, "We shot with an Arri SRI because that's all we could afford: camera, matte-box, batteries, magazines and a 10:1 Zeiss zoom. Aside from a few filters, we didn't have any 'gadgets' at all. And unless we were doing car interiors, which there are a lot of in the film, we stayed on that zoom the whole time. I just tried to keep the focal length between 16mm and 25mm to minimize distortion."

The car interior work was primarily done for sequences featuring Al and Bob, a mildly adversarial duo who spend their time driving aimlessly while they plan their drug buy. "We shot all of it handheld from the back seat with an 8mm prime lens," notes McLaughlin. "This was Gary's idea, and one I didn't really agree with at first, but he liked the way it looked and that it gave him the opportunity to change the dialogue later because you couldn't see the actors' mouths.

"I would have fought him on it, but I had been fortunate enough to see *Gun Crazy* [1949] just before we started shooting. There's a scene in the film where they shot this lengthy piece of dialogue about a robbery from the back seat. And it really worked. It made you an *accomplice* in their crime. The crimes are different in our film, but the technique works the same way."

No lights or even reflectors were used for the car interior work, with McLaughlin opting for a raw, broken look highlighted by golden autumn sunlight, and optimized by Kodak's 7293 and 7245 stocks. He attests, "They have ex-

cellent latitude, which we exploited for the exteriors. I rated them both at a half-stop under, which gave us a sort of bleak, muted look after some of their warmth was timed out.

"We had extremely erratic weather. There's an expression here, 'If you don't like the weather, wait an hour.' We had wind, sleet, snow, rain, and sun, the leaves changed from green to brown, and we only had a window of acceptable light from 9:30 in the morning to 4 in the afternoon. It's a common situation, but our film takes place all in one afternoon, primarily outdoors. So the latitude of the stocks really saved us."

Interiors, such as the drug dealer's apartment, were lit with a minimal lighting kit. "Our biggest lights were some 2K blondes and 2K Fresnels," McLaughlin says. "We shot most of them at T2.5, right down at the end of the lens. But we primarily went into locations and Gary would say, 'Okay, it should look like this.' The problem was boosting the patterns that existed so we could get an exposure, but retaining that natural feel. It looks simple, but that kind of lighting can be just as difficult as something flashy or romantic—you can't rely on the fantasy element to carry you."

McLaughlin does point out one shot in *The Suburbanators* that deviated from their "you are there" aesthetic. He explains, "In a scene at the end, a guy has been hit by a car and has to be lifted into an ambulance. I suggested that we do the shot from just above the actor, pointing straight down in a medium close-up with the 8mm from a mount attached to the stretcher he was lying on. As he was picked up, the camera went with him, keeping the same distance from the actor's face. I was surprised that Gary went for it, because he usually shies away from that sort of thing."

But as McLaughlin reveals, another motivation for the unusual shot was that a layer of snow had fallen the night before, ruining their location continuity. "We had to avoid seeing anything around us," he recalls with a laugh. "I'm sure big Hollywood movies are designed to deal with these situations, but ours wasn't."

535
535B
35BL-4s
35-3
16SR-2
16SR-3

exquisitely maintained
custom camera packages

schumacher
CAMERA

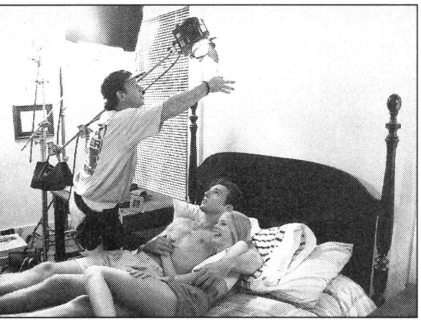
832 W. Superior St.
Chicago, IL 60622
312/243-3400

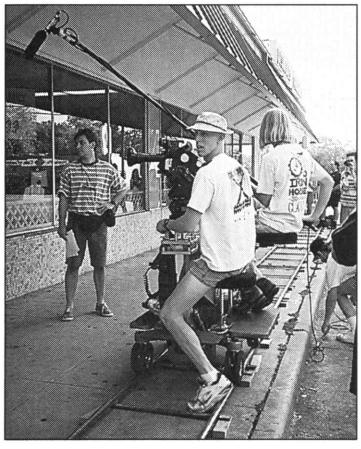
One from the Heart of Texas

Tandem cinematographers William Ambrico and Todd Spencer spark Austin-based writer/director Jeff Stolhand's indie romantic comedy *Seeking the Cafe Bob*.

by Merle Bertrand

EVERYONE KNOWS THAT THE BEST way to ensure success for your independently-produced feature film is to make a grainy, black-and-white, angst-ridden dialogue piece, right? Well, someone forgot to give that formula to writer/director Jeff Stolhand, because his Austin, Texas-based romantic-comedy *Seeking the Cafe Bob* flies straight in the face of those art-house aesthetics.





Photos courtesy of Expressions In Video.

Lighting cameraman Spencer (top) adjusts an interior while cinematographer Ambrico (bottom, on dolly) plans his next shot.

"You *can* make a picture look good without spending a ton of money and having lots of toys," jokes director of photography William Ambrico. "But it requires planning and a grossly underpaid crew."

In the case of *Seeking the Cafe Bob*, it was planning begun in earnest several months before the start of photography that would ultimately set this film apart. And the first decision made was in the camera department. Whereas the traditional American hierarchy calls for having one director of photography, Stolhand agreed to having two: Ambrico and his partner, lighting cameraman Todd Spencer.

"We worked in a style some refer to as more European," Spencer explains. "Willie focused more closely on the camerawork, giving me free reign with the lighting while I also operated B-camera and had a fair amount of input on the shot list. The situation strongly promoted team play."

Which was a good thing, since the dual cameramen and the assistant director (myself) arrived together in Austin from Los Angeles with just one week of preproduction time scheduled. As such, the preparations quickly took on an added sense of urgency. According to Spencer, "We were on such a tight schedule that it was imperative for us to know our locations intimately: power availability, equipment staging areas, direction and location of the sun and when golden hour occurred."

Together with script supervisor Gina Grande, we spent several hours at each location, compiling a comprehensive list of shots for our 18 days of shooting. "We weren't married to the shot list," Ambrico recounts, "but it guaranteed that we would get our coverage. Having a shot list is not a revolutionary approach to filmmaking, but many low-budget shoots don't have one and then everyone stands around for three hours while the director tries to figure out what to do."

All the preparation resulted in that rarity of rarities in the low-budget realm: a relaxed production. "I attribute that to everyone knowing what we were capable of achieving in a certain time slot," Ambrico says.

It was this near-telepathic state that ultimately convinced Stolhand to bring our trio on in the first place. High-school friends and cohorts with Spencer, Stolhand and I graduated from the University of Texas at Austin's film program, and with Dee Dee Stirneman produced the 1991 feature-length Super 8 adventure parody *Quest for the Monkey God*.

I later moved to Los Angeles and rejoined Spencer, who had met Ambrico while working as a PA at the commercial production house FilmFair. We continued to gather experience in the company's boot camp-like atmosphere and later began writing screenplays and producing music videos on our own.

Stolhand and Stirneman, in the meantime, had been carefully building Expressions In Video, their postproduction house in Austin, while slowly raising the money for *Seeking the Cafe Bob*.

The film's plot is a romantic tangle: jilted by his girlfriend, Tom (Christian Zimmerman) moves back in with his old college roommates, Roger (a stand-up comedian, played by Roger Harrell) and Aaron ("the Dr. Kevorkian of romance," played by Michael Dalmon). While Roger sees Tom's newly-regained freedom as a way to recapture the good old days of college, Tom regards it differently. He craves female companionship and quickly meets Sarah (Stirneman), a fiercely-independent beauty torn between having a serious relationship and maintaining her sexual freedom.

"I didn't really think in terms of any particular style when I shot the picture," Ambrico admits. "All I consciously set out to do was take a script that's very dialogue-heavy and keep it from becoming a talking-head movie. I tried to use the camera to make it visually interesting with zooms and movement. But it was tough because we were primarily set at two interior locations."

Spencer explains, "My primary concerns were to make everything seem as naturalistic and motivated as possible. The bonus from that strategy was that when I departed from the standard, [the visuals] really jump out — such as when Tom is having an obsessive-compulsive episode and we light him harshly in an austere bathroom or put him in a dark room huddled in a slash of light."

Combining these strategies, Ambrico and Spencer largely avoided the simplistic three-point lighting and proscenium shooting styles so prevalent in the indie realm. One thing they couldn't avoid, however, was having to

FILM OR VIDEO

SINGLE OR
MULTIPLE SYSTEMS

BY AIR, LAND OR SEA

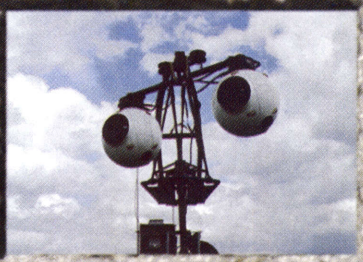
FROM SUB-TROPIC TO
SUB-ZERO LOCATIONS...

THE SOLID CHOICE FOR

- STABILITY
- SERVICE
- SUPPORT
- SUCCESS

WORLDWIDE

ROCK SOLID



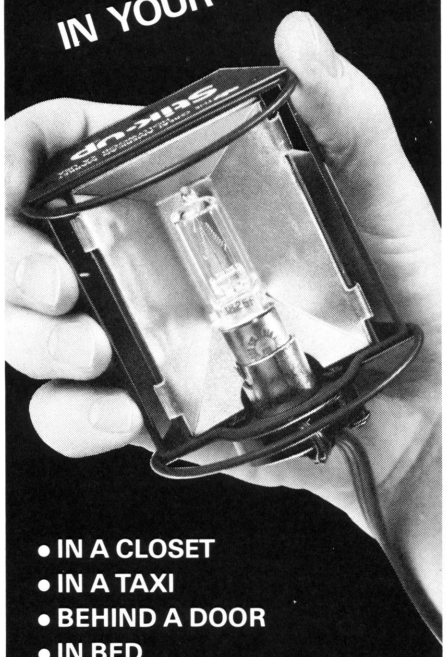
U.S.A. WEST
818.548.0064
Fax 818.548.0627

U.S.A. EAST
407.727.1428 • 800.458.3417
Fax 407.727.8315

CANADA
905.689.2875 • 800.668.4355
Fax 905.689.6627

WESCAM
THE ORIGINAL GYROSTABILIZED CAMERA SYSTEM

THERE'S A
Stik·up™
IN YOUR FUTURE...



• IN A CLOSET
• IN A TAXI
• BEHIND A DOOR
• IN BED
• HAND HELD
• UNDER A DIVING BOARD
• IN JAIL
• AT A ROCK CONCERT
• ON A STAGECOACH
• AT A FASHION SHOW
• UNDER A LUNCH COUNTER

It will make your lighting more effective wherever you need to conceal a small compact light source.

Stik-up, ideal for film, TV, stills. Up to 200W. Also 12V for battery operation. Weighs only 8 ozs. with cord. Stick it anywhere. Kit available.

Write or call for info.

Stik·up™

THE GREAT AMERICAN MARKET

826 N. COLE AVENUE HOLLYWOOD CA 90038
TELEPHONE 213/461-0200 · TWX 910 494 1233

©1984

shoot on regular 16mm. Stolhand sighs, "We were hoping to find a Super 16 package, but, unfortunately, there was nothing affordable in the Austin area, so we worked a deal with another producer: to use his camera and sound package in exchange for the use of our Avid."

The bartered-for Eclair NPR is "a good camera, but this particular one wasn't in the optimum mechanical state," Ambrico says diplomatically. "It was very loud, so I had to take a sound blanket, the sodden kind that weighs five tons, and drape it over me and the camera. And that became a very torturous ordeal, given that this was Texas in August."

Their sole lens was an Angenieux 10:1 zoom, augmented by the very barest of necessities: an 85, a series of NDs, a series of 85 NDs, and a single ProMist. Wooden military-issue legs with a fixed pan-and-tilt head and two 400' magazines rounded out the utilitarian package. However, says Ambrico, "What handcuffed us was not having a good wide-angle lens. I counted 13 instances where I felt we required one. So we had to be creative, to substitute for the shot or find a way to do it in a different way."

The production fared substantially better in terms of its grip/electric gear. Spencer notes, "I had a tungsten/HMI package that was more than adequate, considering the size of the crew I had to work it. Lack of manpower was frequently more of an issue than lack of equipment."

Locked into 16mm, the choice of film stock took on even more importance. "The decision to shoot on Kodak was contemplated early on for stylistic reasons," Spencer explains. "*Cafe Bob* is a nostalgia piece and warrants that bright, Kodachrome look."

Both Ambrico and Spencer had researched the 500 ASA tight-grained 7298 and were amazed at the stock's latitude, granularity, and color rendition, especially when blown up to 35mm. Spencer details, "I could foresee situations where we would have very low light levels and we wanted to avoid the shallow depth of field that low-budget productions are notorious for."

Ambrico agrees. "The latitude on the 98 would provide us with the coverage we would need — even in full daylight with the help of some NDs," he states. "And we had beautiful outdoor locations so keeping everything in focus in the background was a benefit."

"I loved the results we got with it," Spencer enthuses. "I was also pleasantly surprised when a Kodak rep from Dallas visited us to see how we liked the film and what our experience was with it."

But there was still one more potential pitfall looming before the filmmakers. Says Ambrico with a smile, "Todd and I talked extensively about the old 'White Wall Syndrome' that's prevalent in so many low-budget pictures. Fortunately, we had interesting locations and we rarely ran into that phenomenon."

One of these colorful locations was the Electric Lounge, a nightclub used for Roger's comedy club scenes. "That was one of the places where I was given the luxury of a few hours of solid prerig time," Spencer says. "We actually got to hang some lights instead of throwing them all on stands, thus freeing Willie's camera work up. Since it was a nightclub I had plenty of sources to motivate colored light to emphasize mood — as when Roger loses the comedy competition and we have a nice dolly shot that reveals him in a washed-out pool of bluish light."

"I particularly like a conversation scene between Tom and Sarah, which involved a very tricky a circular dolly move," Ambrico offers. "My hat goes off to the key grip, Matt Richardson. We had a Chapman dolly, which doesn't have roundy-round capabilities like a Fisher does, and he basically had to do a circular dolly for two and a half minutes in a very tight space. It was very difficult to get, but that shot was very satisfying once I saw the footage."

A premiere and Grand Prize win at the Austin Heart of Film Festival followed *Seeking the Cafe Bob*'s successful IFFM debut. "We're really pleased with the way everything's come out," Stolhand says happily. "This film looks much more expensive than it should."

You know the name. Now see the clothes.

Filmstrip Jacket—in softest leather and pure new wool

1 . 8 0 0 . 4 5 4 . 4 3 3 4

CALL PANAVISION® AND GET A LOOK AT OUR CATALOG.

Rude Awakening

Canadian writer/director Clement Virgo enlists cinematographer Barry Stone, CSC to craft a stunning first feature.

by Stephen Ashton

THE FEATURE FILM DEBUT OF Clement Virgo, a writer/director who has been garnering accolades at the Cannes, Toronto and Sundance Film Festivals, *Rude* is also the first Canadian 35mm feature to be written, directed and produced by a black team. The film transcends the limitations of a "film-school budget" thanks to the filmmakers' ingenuity and imagination. Its intricate structure, driving rock/reggae soundtrack, highly stylized visuals and poignant social situations evoke images of alienation and stark inner-city life. At the same time, Virgo examines the interrelationships of his tale's well-drawn protagonists.

Virgo, a young Jamaican-Canadian, is a graduate of Norman Jewison's Canadian Film Centre, which was founded in 1986 to cultivate and support new Canadian filmmakers. Virgo first worked there to develop *Save My Lost Nigga' Soul,* his prize-winning short film. *Rude* is among the first three films to be green-lighted by the Centre's Feature Film Project. Shot by esteemed director of photography Barry Stone, CSC, the film boasts a unique narrative approach and distinctive visual style.

Stone has an extensive and award-winning background in producing, editing, and directing as well as cinematography. Why does he choose to focus on cinematography rather than producing and directing? "I think there are a lot of directors out there, and as a cinematographer I get to use all of my skills and also express myself creatively from a visual point of view," he says. "There's a practical side of me that really loves solving problems for someone else's vision.

"Cinematography is a service medium," reflects Stone. "In the old days, in silent films, there were classic battles [for control] between the director and the director of photography. Nowadays, the cinematographer is there to serve and express the director's vision on film, so in that sense the more background he has — acting, producing, editing — the more he can help and offer feedback. It's a collaboration. That's what I love — the truly collaborative projects. That's where the sparks happen, the creative stuff. I have to have that."

A Trio of Tales

Set in Toronto's black community, *Rude* is a triptych of stories interwoven by the poetic Rasta rap of the title character (Sharon M. Lewis), an intense and sultry talk-jock with her own pirate radio station.

Each of the three stories has a distinct setting and style. One introduces Jordan (Richard Chevolleau), a sensitive boxer who is chided by his cohorts to participate in gay bashing, then fights his conscience — and comes to terms with his own homosexuality. A second concerns Maxine (Rachael Crawford), a hip, modern window-dresser who loses her boyfriend, ponders abortion and struggles with depression. The film's centerpiece, however, is the tale of "the General" (Maurice Dean Wint), who returns from prison only to face temptations of his former life in the drug world. Although frustrated by his inability to reconcile with his loan-shark brother Reese (Clark Johnson) and his police-woman wife Jessica (Melanie Nicholls-King), and to provide for his young son, Johnny (Ashley Brown), the General resists the criminal world of his past. He is also a talented artist whose murals adorn the neighborhood and provide symbolic backdrops for much of the film's action.

Just as Virgo's *Save My Lost Nigga' Soul* stems from biblical source material (the narrative is

Jordan (Richard Chevolleau), the talented boxer who must face his own inner demons, is lit softly by a huge overhead bay light made with scaffolding and blondes.

Photos by Amir Gavriely, courtesy of Alliance.

***Rude* (Sharon M. Lewis) performs her Rasta rap in a yellow splash of light created by a 2K and Rosco #18 gels.**

based on the story of Cain and Abel) *Rude* is set over Easter weekend and touches upon themes of death and rebirth, redemption and grace. "The religious imagery started out as a kind of subconscious element in my short film, and with *Rude* it became a more conscious choice," says Virgo. "I wanted the film to have spiritual resonance, but not necessarily just in the Judeo-Christian sense. Barry and I looked at a lot of Renaissance paintings in preparation for *Rude* — canvasses by Caravaggio, Michelangelo and others. They have really interesting religious imagery. For the murals in the film we literally took those images and changed the characters into black people. And we decided to take it one step further, using those same colors in the set and in the clothes the characters wear.

"I wanted to find new ways to tell [this type of] story," Virgo says. "I didn't want it to be sociological, but it had to be about our culture. I wanted to write interesting characters. I did not want to focus on the sociology of the environment; that's been done to a certain extent. This film is about people dealing with their personal selves. The story is essentially about death and resurrection."

Although *Rude* could be considered an art-gangsta film, it is also particularly Canadian. Asked to comment on how his film compares to the expanding body of work in America known as "new black cinema," Virgo is quick to point out that the Canadian black experience is different than that of the African-American. "In the States, blacks live in a post-slavery culture which affects life on many levels. Here in Canada we didn't have slavery. We are a post-Colonial society, and that is something that all Canadians share, whether they are French, British, Jamaican or whatever. We have to make films here that deal with ourselves.

"I wanted to depict black people who are struggling with more than drugs and guns; these characters are dealing with loneliness, sexuality, loss of love — situations and circumstances that all people experience. I wanted to explore the idea of three lives going on simultaneously, connected only by time and place."

On a trip to England several years back, Virgo was impressed by the infamous pirate DJs who were on the air in the 1980s. "[That experience] sparked the idea about constructing a film around a DJ's voice, a rude one."

Rude boasts a polished look that belies its five-week shoot and $250,000 budget, although Virgo points out that the Centre contributed a great deal to the project, including services and influence within the industry. "If we'd had to pay for everything, it would have cost $1.2 million, even with deferrals," Virgo says. "I was extremely lucky to have had the privilege of working with Barry Stone, who spent two months with me in prep! Barry really got into it."

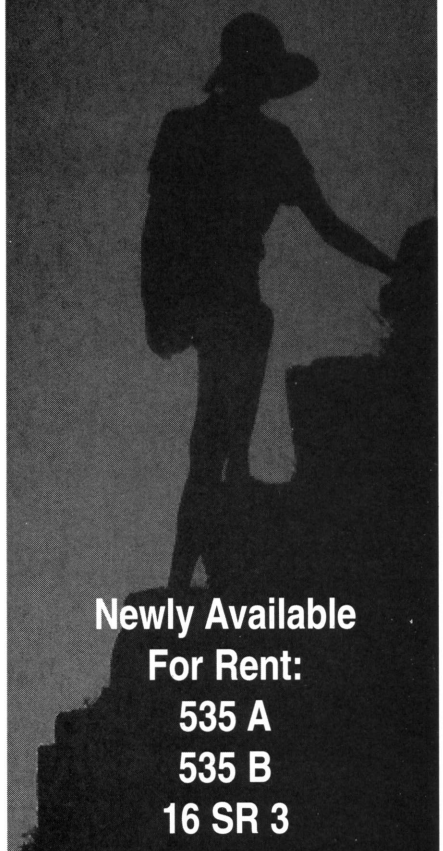
He continues, "Each sequence had its own visual style. Barry and I looked at videos from January to March, sometimes into the early morning hours. He'd bring in all kinds of stuff. We spent time watching *Raging Bull* and other Scorsese films, as well as *Drugstore Cowboy* and *The Doors*."

The Fifties style of the General's story is very classical — master shot, medium shot, close-up. "For the story of Jordan the boxer, I wanted to be jarring, with sharp cutting and fast-moving camerawork," Virgo explains. "For the Maxine story I wanted a more European style, more of a meditation on character, sort of

"Meticulously Maintained Equipment, Unrivaled Rates."

CAMTEC

Motion Picture Camera Rentals



Newly Available For Rent:
535 A
535 B
16 SR 3
16 SR 3 Highspeed
16 SR 2 PL Mount

10950 Burbank Blvd.,
North Hollywood, CA. 91601

TEL: 818-508-7272
FAX: 818-508-7227

like [Polish director] Krzysztof Kieslowski's *Blue*." The style of each sequence evolved slowly, along with the story elements, which were actually fleshed out *after* the casting. "My own vision came out of all of those elements," Virgo says. "I created my own 'hood where a lion could roam, where mystical aboriginal spirits could dance among urban, transported Africans."

> "We had every scene mapped out before shooting. I can't stress enough how important it is to do that, especially on a low-budget film."
>
> — Barry Stone

In fact, *Rude* features a scene with a lion, inspired, Virgo says, by the one that visits Jesus in Scorsese's *The Last Temptation of Christ*. The lion is not only the regal king of the jungle, but a Rastafarian symbol. (Virgo's production company is named Conquering Lion.) "Barry made it possible for me to have the lion scene, because everyone said, 'No, it's too expensive, and it could be dangerous.' We figured out a way to shoot all of the cat shots in 12 hours!

"Barry worked very closely with me after reading the script," he relates. "He knew it inside out, and by the time we came to shoot we knew exactly what we were doing." Their preparation shows up on the screen, as Virgo's earlier experiments with off-speed camera work and stylized use of color are honed to perfection in *Rude*, with time-lapse and slow-motion footage adding to the mood of the film.

Preparing for a Departure

After careful thought, Virgo and Stone decided to move away from a conventional representation of reality and employ more stylized color, extensive front-screen photography, and other expressionistic elements.

"Clement had a strong vision of what he wanted," recalls Stone. "We had every scene mapped out before shooting. I can't stress enough how important it is to do that, especially on a low-budget film.

"Prior to production, we had in fact designed a transition for every single scene. One of the techniques we used was to freeze the actors at the end of the last setup in a scene and then, using a simple peg board technique, trace the elements of the frame from the video assist. When we came to the first section of the next scene, we would refer to our 'book' of frames, lay the appropriate tracing from the previous [scripted] setup over the video assist and compose a frame that would create a seamless transition.

"One simple transition that I really liked involved shooting the end of a scene through a [set] window and tracking left to right from the window into the black wall. We then went outside, and, with the dolly on the flat roof of the studio, tracked left to right out of a black card to see apartment buildings and then into another black card. The next scene was a similar left-to-right track from a black wall into the window of the next set. The illusion is that we are floating, high in the air, from one apartment to another."

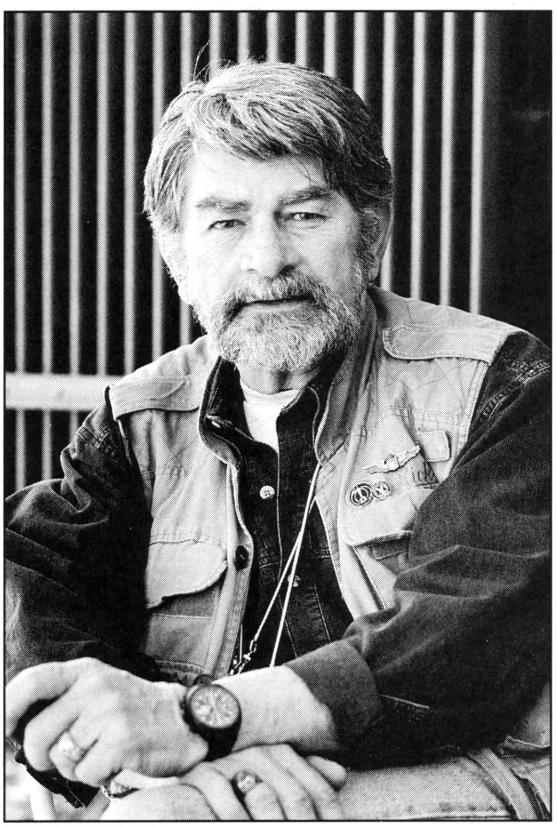
Time-Lapse And Light

The film's time-lapse camerawork was facilitated by mechanical whiz Glen Orr, who adapted the time-lapse camera for Stone while they were shooting. "It was an old 2C with a Nikon lens and an eclectic batch of slow-mo motors, cams and microswitches," Stone says with a smile. "But it was within our budget and it worked, so we're very grateful!"

Stone used Kodak's 5296 for the studio shots and for all of the night exteriors. "I was unable to get my favorite stock, 5295, which was made for multiple-pass cinematography," he laments. "I find that 5298 sees almost too much detail in the dark areas of the frame; it's harder to produce a true black, but I got pretty good results with the 96. In a production like this it is convenient to let the dark shadow areas outside the scene just go black. That way, we didn't have to dress the backgrounds."

Stone used a combination of film and theatrical lighting in-

Director of Photography Ric Waite ASC talks about using anamorphic equipment from Clairmont Camera to shoot *On Deadly Ground*



Ric Waite's credits as Director of Photography include Cobra, Last Light, Marked For Death, Adventures in Babysitting, Uncommon Valor, 48 Hours and The Longriders. He has worked as D.P. on about 40 features and cable movies.

"We rented the Clairmont hard anamorphics (because they're smaller than the Arriscopes) to use with the Steadicam and for hand-holding. But they were so good I ended up using them several times on the stage, on a dolly," says Ric Waite.

"The Cooke 36 to 200 anamorphic zooms were also great – superb optics. We started out with one of those. But we soon got another from Clairmont; and we shot most of the picture with them."

"As usual, I got personal attention at Clairmont," says Mr. Waite. "Denny went out of his way to accommodate me. I have the highest respect for what he's done for all of us."

5 units, 21 cameras

During the course of the production, On Deadly Ground's five units rented eighty-four of our anamorphic lenses and twenty-one cameras. As well as Moviecam Compacts and ARRI 35-3s, they used two of our Wilcam high-speed cameras and an electronic Eyemo in a custom crash housing. Their visual effects unit also used our W7, W9 and W11 VistaVision cameras and Zeiss Hasselblad lenses.

CLAIRMONT CAMERA

4343 Lankershim Blvd, N. Hollywood. Phone: (818) 761-4440. Fax: (818) 761-0861
North Shore Studios, Vancouver. Telephone: (604) 984-4563. Fax: (604) 984-4693

Hey!
have you
seen
those
new
zeiss
macro
lenses
from
OPPENHEIMER
CAMERA

MACRO PLANAR T* 60mm
Lens Composition:
6 elements, 4 groups
Minimum Focus: 10 in. @ 1:1
Aperture Range: T3.2 - 22

MACRO PLANAR T* 100mm
Lens Composition:
7 elements, 7 groups.
Correction of aberation at close range wtih "floating elements"
Minimum Focus: 16½ in. @ 1:1
Aperture Range: T3.2-22

We've modified this pair of high quality Zeiss macro lenses to meet the needs of serious filmmaking. Both lenses have been extensively re-manufactured, including the additions of PL mounts, 80mm fronts, integral focus gearing, accurate T-stop scales, and significant internal modification.

We offer you precision mechanics, high quality finish, competitive pricing and superior Zeiss optics. Available for sale, individually or as a set, only from Oppenheimer Camera.

OPPENHEIMER
CAMERA

SEATTLE
206-467-8666
Fax: 206-467-9165

struments; when he wanted lighting changes during the scene, he hung theater lights and had his gaffer sit off the set with a dimmer board.

Front Projection

"In all of the boxing sequences, you'll see a big wall of posters, and in fact it's just a front-screen we put up behind [the action,] Stone reveals. "The last shot of Rude when she's looking out the window is a slide — a front-screen — so again we avoided opticals. The interiors of Jessica's house were normal and comfortable, whereas the interior at Rachel's apartment was sort of dark. We had to shoot everything in an old building, so the production designer, Bill Fleming, managed to dig up some old miniature sets. Every time you look through a window in the interiors, you'll see a bit of the project outside, but it was all done with miniature sets.

> "I always want to work with someone who has impossible ideas. I think that's where creativity comes from — when you're up against the wall, and don't have enough time or money."
>
> — Barry Stone

"One of my favorite scenes is the tracking shot past Rude outside in the projects into a window of another set [Jessica's bedroom], where the window and wall we tracked into were in fact a miniature. The other three walls of the real set were 12 feet behind the window to create the correct perspective.

"The advantage of this device was the ability to create the illusion of a fast tracking shot in a limited studio space while still using a long enough lens to begin the shot as a medium close-up," Stone explains. "Furthermore, we were able to create the illusion, with the aid of the other miniature sets besides our one wall, that Rude was outside on the street.

"We had an hour to set it up and to shoot it. It felt great to be able to manage the number of complicated and difficult shots we had made in the 25-day shoot," Stone recalls with pride.

The Matter of Color

"We tested a lot of different kinds of gels," Stone explains. "You really can't tell [what you need] until you actually work with the actors. Because we were dealing with a full range of skin tones, we tested different gels with the individual actors in preproduction. Because the colors we chose had to help us establish different moods as well as suit the particular skin color of the actors in the scene, we were able to narrow the field down to half a dozen gels.

"I calculated my exposures with a gray card and spot meter and let dark [elements] go dark. Only in very specific instances did I add a little extra fill or back light."

The use of expressionistic color presents a challenge to film labs during the process of making workprints and answer prints. To fine-tune the tone of a particular scene, Stone often requests timing lights based on a color chart and gray scale placed at the head of each new setup. In order to make a scene warmer or colder, he places a complimentary gel over the chart light and then has it timed to look normal. That way, he gels only one light instead of every instrument in the scene. The workprint usually reflects the exact look he desires, although getting an answer print to conform can be a different story.

"Basically, the difficulty comes when you use a color chart with these gels on the chart so that the timer doesn't time out the colors that you want," explains Stone. "It is sometimes very difficult to get those subtle colors of the workprint back, because the first answer print is a rough guess. Our budget was extremely tight, so I was trying to find a way to save the cost of an unusable first answer print and a lot of extra subjective work at the end of the production.

"I got to thinking, 'Why not get those first timing numbers and give them to the editor, Susan Maggi?' One of her assistants, Joyce Poon, agreed to keep a record

CREATING SPECIAL VISUAL EFFECTS

UCLA Extension and Weynand Training International (WTI) announce a collaboration to present a new sequence of courses in digital image creation taught at the highest professional level.

All hands-on workshops are taught on the latest Silicon Graphics computers at the new Silicon Studio Training Center in Santa Monica.

AN INTRODUCTORY COURSE IN THE FUNDAMENTALS OF SPECIAL EFFECTS...

Special Visual Effects Cinematography

Visual effects have played a major part in films from the beginning of the medium when the Melies brothers shot a rocket to the moon up to the latest and most sophisticated outer space epic.

Through lectures, discussions, screenings, guest speakers, and demonstrations, participants gain an in-depth understanding of visual effects from the simplest double exposures through up-to-the-second digital morphing.

The instructors are **MARK SAWICKI**, matte shot cameraman at Illusion Arts, whose credits include *Beverly Hills Cop II, The Shadow, Star Trek V* and *VI*, and *Batman Forever*, and **GLENN CAMPBELL**, visual effects supervisor, Area 51, for *Space: Above and Beyond*. Mr. Campbell's credits include effects cameraman on *Star Trek* and *Blade Runner* and computer graphics artist on *Johnny Mnemonic*.

PROGRAM

- Why Use Visual Effects?
- Traditional Techniques Revisited - Animation and Matte Painting
- Miniatures
- Front and Rear Screen Projection
- Motion Control
- Optical Printing
- Computer Graphics and Digital Effects
- What Does It Cost and Why?

Wednesday, 7-10 pm,
April 10-June 26
Universal CityWalk:
UCLA Extension Center, Room 325
Fee: $445 **Reg**# T1499G

A ONE-DAY PREREQUISITE FOR ALL WORKSHOPS...

Digital Backlot: An Introduction to Digital Effects for Film and Television

Featuring top feature film and video special visual effects creators, this one-day program is ideal for anyone wanting to expand their knowledge and understanding of the digital effects process.

Screenings and case studies are presented by **DEBRA KAUFMAN**, a freelance writer whose focus is digital effects in the entertainment industry. Guest speakers will include **HARRISON ELLENSHAW**, Vice President of Buena Vista Visual Effects and **MARK SAWICKI**, see previous credits.

Saturday, 9 am-4 pm, March 30
West Hollywood: Directors Guild Theater, 7920 Sunset Blvd.
Fee: $125 **Reg**# T1553G

SPRING QUARTER 1996 WORKSHOPS...

Introduction to Creating Digital Effects: An Intensive Silicon Graphics Workshop

2-D Paint and Imaging Techniques Using Parallax Matador

3-D Animation Using Wavefront Explore

Digital Compositing Using Wavefront Composer

2-D Imaging and Special Effects Using Elastic Reality

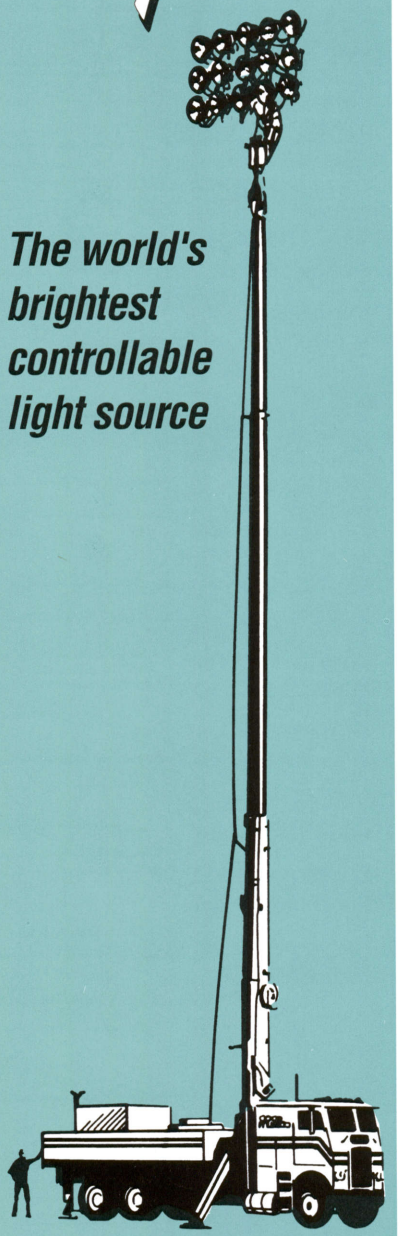
Wire Removal Using Parallax Matador

Creating Your Own Demo Reel

TO ENROLL with VISA, Discover, or MasterCard call **(310) 825-9971** or **(818) 784-7006**.

For more information about these and other cinematography courses call **(310) 825-9064** to request your free copy of the Spring 1996 *Professional Studies in the Entertainment Industry* catalog.

HL B76

MUSCO
Light
The world's brightest controllable light source

MUSCO
MOBILE LIGHTING, LTD.
Nationwide:
515/673-0491 • 800/354-4448
Los Angeles:
818/988-1791

of all the lab timing lights [and their settings.] Nine months later when the picture locked, Susan's assistant David was given the task of relating the edge code numbers from each cut of the workprint to the specific camera roll from which it had come. Then he was able to ascertain the timing lights given to that particular roll from the sheets. It was tedious work but, surprisingly, it only took a little over a day to complete. Then the lab took all of these lights and applied them to the neg, and made some small adjustments that Clement and I had requested based on screening the cutting copy [workprint]."

As Stone recalls with glee, "It worked! The changes we made for the second answer print were very minor."

Risking the Impossible

Virgo acknowledges that it was a tremendous opportunity for him, as a first-time director, to work with Stone, who had won awards and praise for his work on the Canadian feature *Paris, France*. But Stone is quick to note, "It was good for me working with Clement, too. I always want to work with someone who has impossible ideas. I think that's where creativity comes from — when you're up against the wall, and don't have enough time or money.

"Clement had his impossible vision: the lion was an impossible idea. We could only afford having the lion for one day in the studio, and we needed the him in a whole series of scenes in various locations. There wasn't the money to shoot opticals the way I like to shoot them — on VistaVision, so that when I go that extra generation I don't lose quality. So we went back to really old-fashioned methods. We actually rewound the film in the camera for effects."

Of his experience with the Jungle King, Virgo says, "You don't work with the cat; if the cat feels like working, then he works! That's it. His trainer, who had a big scar on his face, said, 'If there is anyone in here on their menstrual cycle — leave.' About six women split like *that*," Virgo laughs, snapping his finger.

Stone adds, "We had to do all of these in-camera matte shots and hope that he would behave. So we shot the lion using front-screen, obscuring half the frame with a matte, and lit in such a way so that the shadow would obscure the matte line. I shot him in various situations and then rewound the film. We went back several days later [without the lion] when the actors came in for their scenes and we carefully set up the same situations, but I now put the black matte on the other side of the frame and exposed the negative with the actors in the shot. We had the actors lit in a similar way so that the shadows would fall across the matte line. This way the whole scene was on one piece of original film."

Although everything turned out perfectly, there was one tense moment when their reluctant star jumped a barricade and began roaming the set. Virgo, wide-eyed, recalls, "I was sitting behind the barricade looking at the video monitor. As we were doing this take, the lion jumped out of the frame. I wondered, 'Where's Bongo?' I turned around and there he was right behind me ! I heard the trainer say 'Don't run!' I froze and he came over with a bucket of steak and got the cat back into the set for another take!"

Rude won the Special Jury Citation of the Toronto-City Award for Best Canadian Feature Film at the Toronto International Film Festival. It was also nominated for eight Genie (Canadian Oscars) Awards, including Barry Stone for Best Cinematography, Clement Virgo for Best Director and Best Screenwriting, producers Karen A. King and Damon D'Oliveira for Best Picture, Susan Maggi for Best Editing, Aaron Davis and John Lang for Best Original Music and Clark Johnson for Best Actor in a Supporting Role.

Stone has just completed shooting an innovative TV series for the CBC titled *Straight Up*, which began airing in Canada in February. Its six episodes were all shot together as a feature and each of the episodes are interrelated in time. "It's very courageous television and I'm really fascinated," Stone says. "We did virtually no lighting, pushed the stock 2 ½ stops and handheld nearly all of the show on the streets."

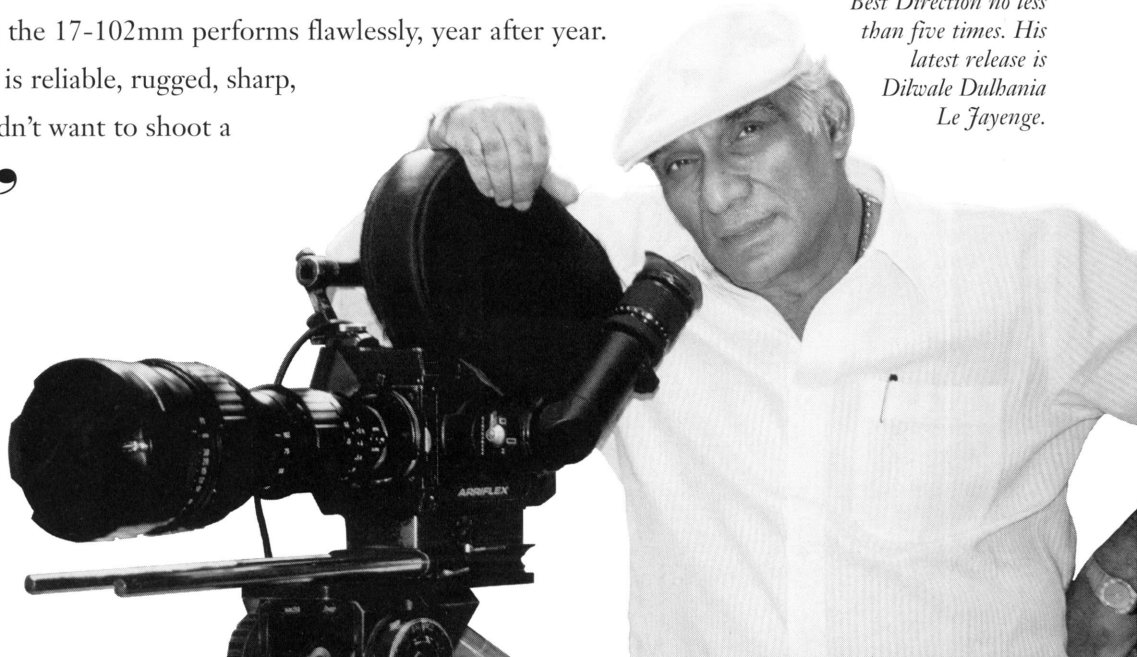
The World of Angenieux Lenses.

"I depend on the Angenieux 17-102mm zoom on a daily basis—and it has never let me down. Its incredible resolving power enables me to get the crisp images I strive for. With the Angenieux 6X, I know the subject will be sharp whether I stop down or shoot wide open.

Shooting during India's dry season often means exposing our equipment to dust and blowing sand. And when the rains begin, humidity can be quite a problem. That's why the Angenieux zoom's sealed housings are so important. Even in the most extreme conditions, the 17-102mm performs flawlessly, year after year.

Angenieux's 6X is reliable, rugged, sharp, and flareless. I wouldn't want to shoot a film without it."

Yash Chopra directed his first film, Drool Ka Phool, in 1958. Since then he has directed a total of 26 films, winning the Indian National Award three times and Filmfare Awards for Best Direction no less than five times. His latest release is Dilwale Dulhania Le Jayenge.



Jeff Giordano: 1-800-228-1254

Century precision optics
A TINSLEY COMPANY
10713 Burbank Bl., N. Hollywood, CA 91601
Tel: 818-766-3715 Fax: 818-505-9865

angēnieux
42570 Saint-Heand France
Tel: (33)77 30 42 10 Fax: (33)77 30 48 75

Days of Wine and Hypnosis

Cinematographer Michael Wojciechowski and first-time director Evan C. Crooke use cinematic wiles to lend intriguing and expansive visuals to their independent collaboration, *The Killing Jar*.

by Michael X. Ferraro

Photos by Dan Zaits, courtesy of Paragon Pictures.

Cinematographer Michael Wojciechowski manipulated his lighting to allow cool blues to invade warmer tones in an attempt to underscore the protagonists' claustrophobia.

ALTHOUGH PHYSICALLY SET IN California's lush wine country, *The Killing Jar* is an independent film that takes place on many different planes. Described as a "nouveau" psychological thriller, the story unfolds in both the past and present, as well as the conscious and the subconscious, all amid a dangerous sour-grapes situation fermenting at a struggling vineyard.

Starring Brett Cullen (*Apollo 13*) and Tamlyn Tomita (*Four Rooms*), the film's idyllic setting masks a lurid subtext. Expecting to return triumphantly to his hometown to run the family business, Michael Sanford (Cullen) instead encounters a hostile work environment, and then has the misfortune to drive past a "stranded" car whose occupants are found brutally murdered the next day.

Did he see any carnage? Or any suspects? Did he possibly commit the murders? These are just some of the questions the film tries to answer as Sanford is dragged unwillingly through his painful memories.

Working within a typically modest indie-size budget, director of photography Michael Wojciechowski's task was akin to making wine from water. Collaborating with first-time director Evan Crooke, 26, Wojciechowski brought eight films' worth of experience to the project, including *The Guyver — Dark Hero* and *Sleepstalker —The Sandman's Last Rites*, on which he first worked with *Killing Jar* producer Shelly Strong and co-producer Jason Saffran. Previously, he had gaffed for Janusz Kaminski, ASC on two Roger Corman films (and shot second unit for one), in addition to logging stints as a lighting designer and rigging gaffer for the New York City Opera, the Alvin Ailey Dance Troupe, and even the Grateful Dead.

Crooke admits that, for his first project, he was initially "looking for someone with vast experi-

ence, a father-figure type," but he says that Wojciechowski's impressive reel and collaborative spirit won him over. The two shared the same feel for the material, which darkens and constricts after a fairy-tale opening.

The Killing Jar begins in the kind of world that is familiar to many moviegoers — a storybook setting where each day is sunny, every blade of grass stands at attention, and our lead couple luxuriates in a golden glow. But in the world of independent film, even the "beauty shot" is never a gimme: although the filmmakers shot on location at the Sanford Vineyard in Lompoc, California, a postcard-perfect working vineyard, the harvest was over, and thus the irrigation system had shut down. "So the fields were browning," Wojciechowski recalls. "One week later and we couldn't have shot there.

After a series of tests, Wojciechowski (below, left) utilized poly steel reflectors to create contorted images for hypnosis-induced flashback sequences. 5245 was used to "go really high contrast and get that Technicolor look."

"We did a fair amount of grad work on our wide exterior shots," he continues. "We tried to be as unobtrusive as possible [with the grads]; they were really just to enhance the mood of the shot. We used some pink and some purple, very light, to make some of the browner dead landscape come alive a little bit, and make the scrub oak trees pop.

"We also used some corals, and light straws in conjunction with coral, on the bottoms of the frame where we'd have grapes and whatnot, because we were starting to get browns and yellows. I used some color-correction grads also, which brought a lot of light back to the vineyard." He was pleased with the performance of the new Twilight Grads, "hot off the Tiffen presses," which added hints of pink and magenta. Later, when the fields were supposed to be wilting, the crew used some cyan grads to desaturate the picture and bring out the browns.

Almost all exteriors were shot on 5248, which pleased Wojciechowski. "I tried to stay away from the 5245 as much as possible so I could use it for the flashback sequences, where I really wanted to go high contrast, add to the shadows, and get that Technicolor look to make the true background look fake."

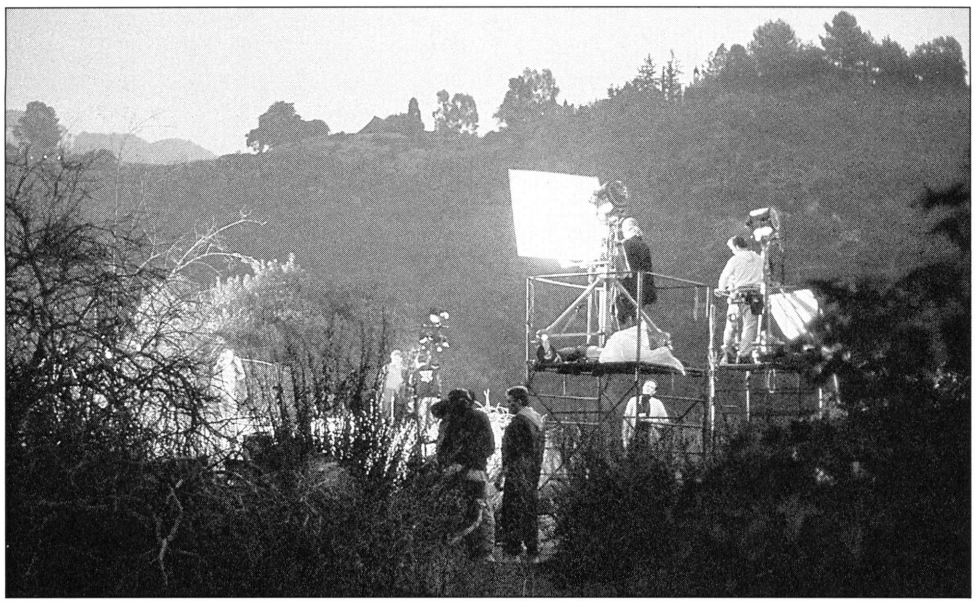
The only other time he used the 5245 was "if the conditions went from sunny to cloudy. I knew how to treat it to make the contrast levels come up, to keep continuity in the scene."

He went with the 5293 on most interiors and shied away from the 5298, because he "doesn't think it's rated quite right" at 500 ASA. "It should be a 320 or 400, depending on the tonality of the scene. It seems like it'll get milky on you real easily unless you put a lot of light on it. But when you put enough on it, the blacks are really nice and rich. The T-grain technology shows through. I usually rate it at 320."

To maintain consistency with stock and filtration, he also went exclusively with HMIs, working with one 12K, two 4K Pars, two 2500 Pars and two 1200 Pars. "Luckily I had just enough light to stay at least above a T2, even in the bigger locations," Wojciechowski notes, "and we were still able to use our 200 ASA stock [the 5293]. So I still had a nice tight grain."

Many scenes were shot night-for-day, a feat the cinematographer is "rather proud of, given our fairly small HMI lighting package." In fact, one critical shot at a garage involved overexposing the potential killer by 1 ½ to two stops as he approached the foreground.

Wojciechowski is quick to point out that the people around him helped lighten his load. "My gaffer, Dave Pierro, and key grip, Tom Skulsky, really did a great job, allowing me the freedom to walk off the set when I needed to." He



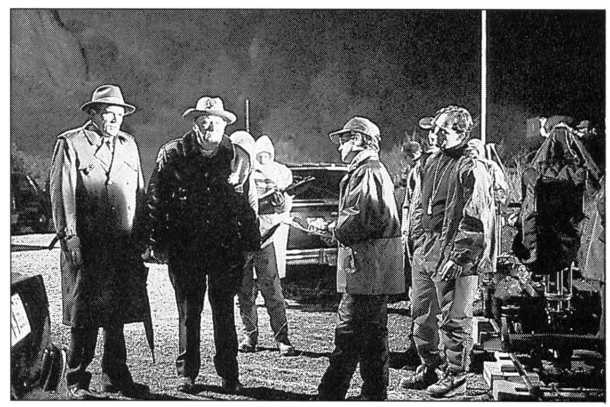
Time constraints compelled night-for-day shooting with the help of a modest HMI package (above), while the veteran cast saved extra production time by playing out lengthy masters. **Right:** *Wojciechowski credits actors Tom Bower and M. Emmet Walsh (from left, with blue-capped director Evan Crooke) for making a rainy crime-scene sequence possible.*

also credits producers Strong and Saffran with "giving me enough tools to do the job, because it was pretty ambitious for the budget we had."

Wojciechowski began the film with a Panavision Gold camera, but traded up for a Gold II. Mark II lenses were used throughout. The cinematographer lauds the Gold II's "great viewing system," and notes that "Lisa Martin and the people at Panavision have been incredibly good to me."

The Killing Jar shoot also benefitted from a veteran cast whose adaptability Wojciechowski found indispensable. "We had a lot of great character actors who knew what they were doing, and they saved my butt," he says. "If there was a scene where I wanted to watch them play, I could."

Such a sequence involves two policemen (played by M. Emmet Walsh and Tom Bower) searching for victims in the rain. "We played a two-minute scene all in one moving master," the cameraman notes. "Tom starts in a medium, comes into a close, and out into a wide two-shot with Emmet. They walk into a tight two-shot, and then Frank McRae and another guy come in and we follow them to reveal this valley we lit near the Bronson Caves in Hollywood, where they find bodies strewn in a large ravine. I've got five great takes of it, and it's just a matter of picking the best one. That helped us a lot on this budget."



He also praises operator Mike Gallagher and focus puller Mark Strassburg for "top-notch" work that "allowed me to set shots like that and then walk away from the scene without going back into it to get coverage. I knew we had it." Crooke, meanwhile, estimates that he did about 2,000 storyboards to help with the planning.

To underscore the paranoia of the tale's protagonists as they descend into a claustrophobic hell, Wojciechowski played with a little "film grammar," manipulating the light within the sets. "We keep the warmth in the middle of the frame, but we bring this cool light in around them, representing the nastiness as it sort of squashes their world."

A scene where Sanford is finally able to tell his wife about a memory he's been repressing is, according to Wojciechowski, "the only time when they are together that he actually turns out into the blue light, and we play the warmth behind them. It's as if they're stepping out into the cold a little bit, and that's the beginning of the third act. In many ways, it was like a progression, mixing the color temperatures along with the overall normal dramatic progression of the film."

Due to the story's fractured nature, Wojciechowski and Crooke deemed that there would be three visual motifs in the film, each representing a different facet of the ever-shifting emotional prism. Rather like putting down separate overlays to create a composite, this pattern included the aforementioned overexposures, distorted flashback visions, and reflections.

"One of the underlying themes in the film is denial," Wojciechowski explains. "And if you're in denial, there is usually something beneath the surface that isn't readily apparent. That's the subtext we were going for with the reflection shots we did."

Characters who could possibly be linked to the film's pivotal act of violence are ushered into the proceedings through visual side doors, their images bouncing indirectly off gleaming surfaces such as car doors, windows, and even a metronome, as is the case with a hypnotist (Brion James) who tries to guide Sanford through his memories.

When Sanford is placed in a hypnotic trance, the film shifts to the POV of his murky visions. Wojciechowski's task was to visually convey that "something was being extracted from the character's mind that he [consciously] couldn't quite wrap his brain around. It's like in a dream where certain things have clarity, and other things don't. The look is also similar to the paintings of Vermeer; he pays attention to some details, but his faces are soft and impressionistic."

To lend these visions an "otherworldly" feel, the cinematographer chose a low transparency gel on his HMI light. "We were going for an 'electric blue' kind of look," he explains, "and we wound up shooting at six [frames per second, later printed four times each], to get into them.

"In the hypnosis scene, we're driving along and we cut to what's supposed to be happening in the POV character's mind; he's driving with this eerie blue light. We've already seen this shot in 'normal movie land,' but now we go back and it's got this electric blue hue and the camera slows down. Everything stops being normal, and starts to streak, sort of like a [slit-screen] effect," he notes.

Facilitating the in-camera effect was Panavision Speed Aperture Control, which syncs the shutter to the iris control and allows simultaneous speed and stop pulls.

Obviously, such a transition cannot be a jarringly abrupt one, or audiences will clamor for the projectionist's head and producers and directors will tear up the cinematographer's rolodex card. Wojciechowski used the technique to inject some dramatically crucial haziness into the flashbacks, and to bring a new perspective to an interesting but well-examined genre. "Because of the shutter speed, you get blur, and because we go from 24 to 6 frames, I built a mathematical ramp [to smooth out the deceleration,]" Wojciechowski notes. "In a .3-second ramp, using eight frames, I took the first frame and printed it one time. I printed the second one twice, the third twice, the fourth three times and so on, until we got to six frames. That's kind of our visual bridge toward shooting into [distorted] reflective surfaces."

Using director Crooke's idea of "a bathroom mirror covered with water" as a starting point, Wojciechowski struck out on an uncharted expedition. "I experimented with several different types of high-polished metals and flexible mirrors, and mylar mounted on foamcore and odd-shaped frames — all sorts of weird stuff," he says. "[We tried] anything that would move to distort the image, because we didn't have

FILM AND VIDEO PROFESSIONALS TEACHING THE PROFESSIONALS OF TOMORROW

Columbia College-Hollywood

The Film & Video College

- Degree Programs in Film & TV/Video Production.
- Faculty of Working Professionals.
- Practical, Hands-On Education.
- Celebrating Our 42nd Year

Our students go beyond theory to produce more than 40 Film & Video projects a year. Our degree programs are comprehensive, covering all creative & technical facets of production.

CALL OR WRITE FOR MORE INFORMATION:

Columbia College-Hollywood • 925 North La Brea Avenue • Hollywood, California 90038 • (213) 851-0550 • FAX (213) 851-6401

MAGNUM ON THE SET:
with Michael Ballhaus, ASC

"Magnum is a versatile and trouble-free machine. It's exactly the tool we needed for our style of photography and the many action sequences we faced."

Michael Ballhaus

Photo Peter Sorel, Outbreak © Warner Bros.

Michael Ballhaus & Magnum on the set of *Outbreak* from Warner Bros.

MEET MAGNUM—the completely modular dolly system that offers filmmakers an unprecedented array of camera movement tools. The sturdy, lightweight basic dolly features a 360° rotatable bearing and ultra-smooth combi-wheels that can be configured in 16 different ways.

Now attach a base plate, a manually crankable column, or the remarkably advanced Electromechanical Column. Add the Magnum Duo Jib to greatly expand the *flight range* of your camera and crew of two. Complex camera moves utilizing both the Electromechanical Column and Duo Jib can be programmed directly into the Magnum for digitally precise repeatability.

Find out why Hollywood's top filmmakers are talking about the new Magnum Dolly from Movie Tech.

Movie Tech
Film Equipment GmbH & Co.
Levelingstraße 9, 81673, Munich Germany
Tel. (089) 43 40 81 Fax (089) 43 12 961

hq STUDIO EQUIPMENT, INC.
3088 Clybourn Ave. Burbank, CA 91505
Tel. 818/295-3955 Fax 818/295-3958

prime television INTERNATIONAL

The largest source of broadcast NTSC equipment in Europe and the best crews and equipment around the world. For a brochure or further information please call +44 181-969 6122

We're here to help you make it.

VANCOUVER FILM SCHOOL

VFS ACTING

The 3-tiered full-time program, special skills sessions and master extension classes provide a comprehensive program featuring the theory, technique and practice which encourage intuitive and skillful film acting.

VFS FILM

An intensive, hands-on immersion program where students receive more actual production experience in 10 months than most film programs offer in 3–4 years.

Call.
Compare.
Nothing does.

Call: 1-800-661-4101
Canada: (604) 685-5808

Web: http://www.multimedia.edu

E-mail: query10@multimedia.edu

VANCOUVER FILM SCHOOL
#400 – 1168 Hamilton Street, Vancouver,
B.C. CANADA V6B 2S2

the money for digital effects."

Grip Brett "Scooter" Losner served as "my main vision manipulator," Wojciechowski laughs, recalling the various paces the handheld poly steel reflectors were put through. Some of the more popular incarnations include a "double inverse bend," the always popular "concave wiggly" and, of course, "the Scooter."

Fostering a loose but productive atmosphere for his crew is important to Wojciechowski, who also enjoys the independents' reliance on resourcefulness. While apprenticing in Chicago under the late Jack Whitehead, BSC (who helped launch the British Society of Cinematographers, and also served as a special effects cinematographer for Alfred Hitchcock), he would tag along when his mentor made set visits to films such as *Poltergeist 3* as a special consultant.

"He'd teach cinematographers how to do old camera techniques, which has actually helped me a lot on low-budget projects because it opens up a part of your brain," Wojciechowski says. "It's like algebra. Once you get it, you develop a whole new way of looking at things."

Different approaches are often de rigueur in the low-budget world, where "you don't necessarily have all the tools you'd like to use." Recalling that he once shared such a frustration with Whitehead, Wojciechowski notes that the old master presented him with a valuable analogy. "He said, 'Think of the film as being a circle. For you to complete the film you want to hit every point in that circle. You don't want to find yourself on the edge of it, trying to break out, because you're missing all this other great material on the inside. No matter how big it is, stay in it. And make sure you hit every point inside, because there's a lot you can do if you pay attention."

Giving Back to *Dorothy Day*

Director of photography Michael Fash, BSC brings a unique quality of light to this period tale of selflessness.

by Marc Bruno

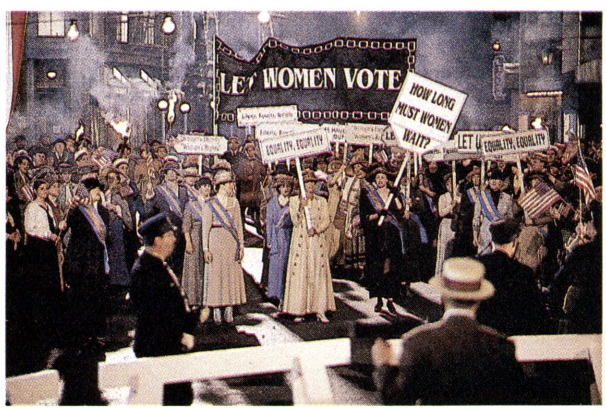
"Dorothy Day was an ordinary person who assumed extraordinary duties in Depression-era America, and this film attempts to show her as a human being, not just a historical figure," says cinematographer Michael Fash, BSC. As he speaks, Fash is setting up for a crowd shot on a crane overlooking the New York backlot at Paramount for *Dorothy Day*, a bio-pic about the life of the feminist Catholic social worker.

Fash notes that there is a common misunderstanding in Hollywood about the subject of the film, directed by Michael Rhodes and produced by Paulist Productions.

"Almost every time I tell people I'm on this job, they ask, '*Doris* Day? Isn't she still alive?' Not many people on this side of the Rockies have an inkling of who Dorothy Day was and what she did for the poor. Her Hospitality Houses are still around."

Actor Martin Sheen, who co-stars in the film with Moira Kelly, was a beneficiary of Day's goodwill in the late 1950s. "I was fresh from Ohio," he recalls, "working in the Lower East Side at the Living Theater, sweeping floors and waiting to get a walk-on in a play nobody's heard of since. Judith Molina, the lifeblood of that theater, sent me to Day's Hospitality House to eat. I had no money and the theater paid nothing. She and Dorothy were friends, but I could have been anyone. That was the beauty of Dorothy's idealism. I see my role in this film as a sort of payback for what she gave me then."

Photos by John P. Johnson, courtesy of Paulist Pictures.



Day, who died in 1980, might have been impressed with the filmmaker's $5 million budget: she ran her homes for the poor almost entirely on the goodwill of donors. But for Fash and his fellow filmmakers, the budget posed an artistic hurdle, forcing them to do their most meticulous work.

Says Fash, "It is always a difficulty when you have limited funds, and it means you must put everything on the screen. *Dorothy Day* is a period piece, and those are always more expensive. In this case, we saved a lot by shooting locally; nothing was done in New York. This meant pulling out all the stops to technically make the setting look like the East Coast in the early 1920s."

The cinematographer, who lives in Connecticut, is very particular about the differences between East and West Coast sunlight. "West Coast light is harsher, the sun almost colorless. It makes things appear brighter. In New England, you find a gray and green wash. Objects appear saturated and more three-dimensional. The shadows pull the eye behind things. You tend to look more at background. Neither situation is ideal, and you have to account for the differences."

As Dorothy Day, actress Moira Kelly (above) is set apart from the crowd by a wisp of smoke. To replicate East Coast light on Paramount's New York backlot (left), Fash shot tungsten-balanced Fuji with no correction. Nighttime scenes were shot at dusk with boosted practicals.

Some Staten Island scenes were shot at Broad Beach in Malibu. For extremely long tracking shots of Day riding her bicycle, Fash notes, "We found a place with a very firm beach and used a vibration isolator."
Below: ***The cinematographer (at right) and director Michael Rhodes had previously collaborated on the period series*** **Christie,** ***which proved a great background for making*** **Day.**

To get the effect he wanted on *Day*, Fash adjusted the diffusion and softness of each shot. "I have a set of coral filters I particularly like," he says. "There is a 14-degree range there, so I can pretty much get whatever I need under a variety of lighting conditions. I supplemented the effect by controlling color saturation with polarizers and the amount of exposure." The cinematographer additionally used blenders, sometimes combining neutral density filters with either coral or blue to manipulate the color scheme throughout the film. He also controlled the level of saturation with polarizers, exposure, and his behind-the-lens stocking silk, which he used for the entire film.

"In addition to giving me the sepia tones I was after, the brown net softened the highlights and minimized contrast. To do something like this, I recommend starting with the sharpest lenses you have, such as the Primos. You can always bring a lens down with filters or gauze, but a soft-focus lens cannot be brought back up." To that end, he relies on Panavision cameras and Primo lenses. "Panavision has always been good to me," says the 55-year old British native, "so I use them whenever I can. On *Dorothy Day*, they went the extra mile in making the film happen by donating a lot of services and equipment we otherwise could not afford.

"Samuelson's in London made similar commitments to filmmakers," he continues. "I remember when I was young, I wanted to practice the wheels — to pan and tilt — and they gave me a whole head and tripod to practice with for as long as I needed. Things like that come back to help a company later."

Before establishing the *Catholic Worker* newspaper and the Hospitality Houses for which she became renowned, Day spent her career as a journalist, most of it in the cramped quarters of New York's muckraking press of the 1920s. The cinematographer utilized a modified Pan-Arri for shots — mostly handheld — of these intellectually-vibrant offices. "These cameras are unblimped," explains Fash, "but the handheld shots were usually cutaways without sync, so everything was ambient or dubbed and camera noise didn't matter."

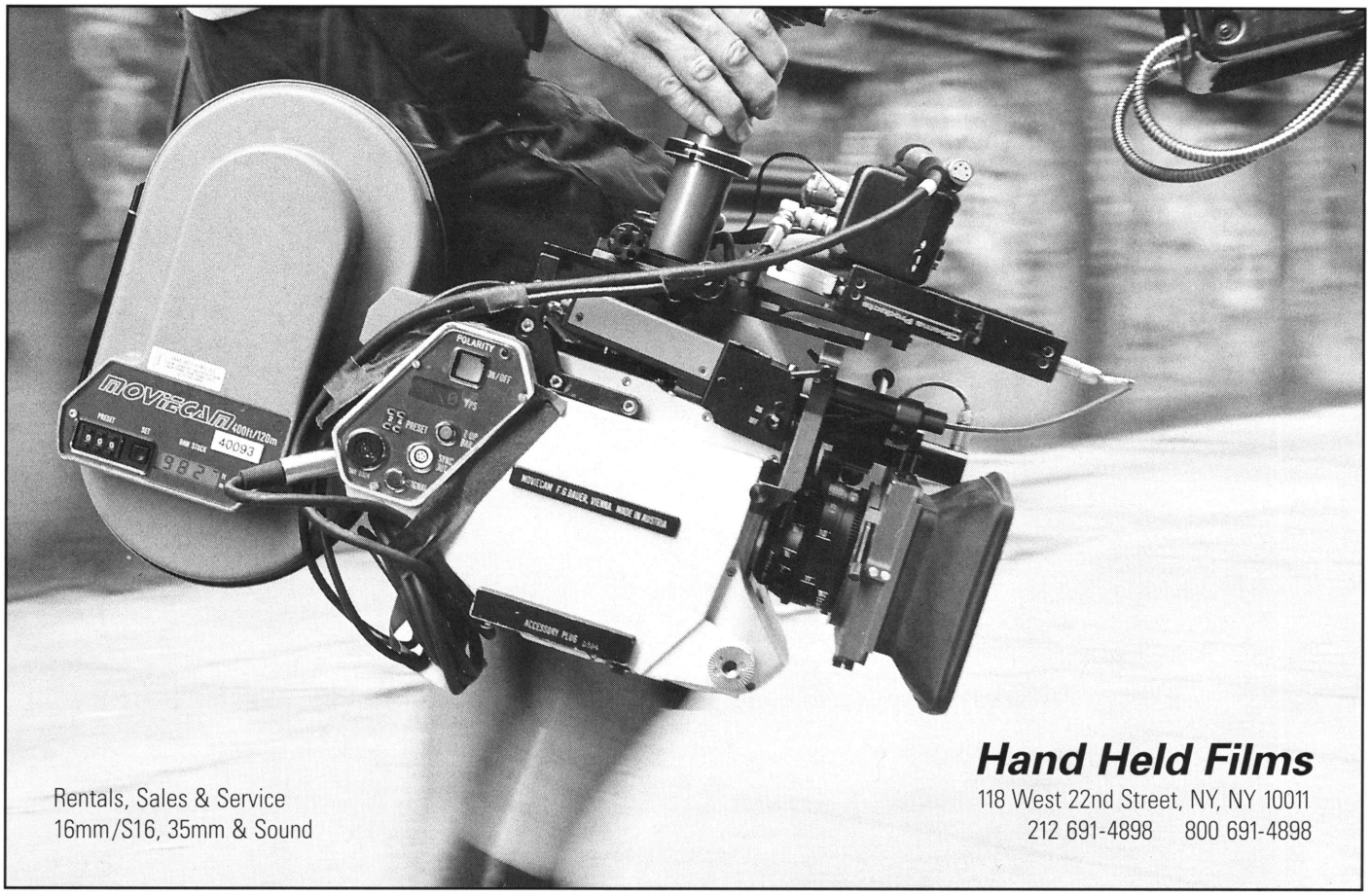
Later in the film, when Day establishes her Hospitality Houses in abandoned tenements, Fash's camera takes us into the crowds of homeless men and women who take refuge from the bitter Manhattan winter. "Dorothy lived during a time of great social upheaval," notes Emmy Award-winning director Rhodes. "My aim was to find the smell of that time and place, to bring the audience to the very air once occupied by the flesh-and-bone Dorothy Day. [I didn't want] to explain her, but *find* her. I gave Michael and his crew the freedom to help me do this because he and I shared the same vision."

Due to the tight budget, Fash worked closely on preproduction decisions with Rhodes, production designer Charles Rosen and the producers. "The thing I felt good about from the beginning was the way the producers laid everything on the table. Paulist Productions, who also produced *Romero* with Raul Julia in 1989, are progressive filmmakers whose primary concern is not commercial. They want to say something interesting about Catholics, women, and poverty in America. Their commitment informed our working relationships on the set. The effect was extremely positive."

Paulist Productions is a non-profit company founded by the order of Catholic priests for which it is named. It receives no funding from the Church, but many of its contributors are Catholics and Catholic support groups.

"Paulist gave me complete freedom to say what I wanted to say," adds Rhodes. "After all, we're talking about a woman who was a feminist and a socialist, who had an abortion and an illegitimate child. Her radicalism didn't waiver when she converted to Catholicism. In part, this is what the movie is about. If you look at the similar messages in *Day* and *Romero*, [you see that] these are people whose beliefs were in their actions."

Fash points out that many of the 300 extras in the film were volunteers from local churches. "Without the volunteers, produc-



Rentals, Sales & Service
16mm/S16, 35mm & Sound

Hand Held Films
118 West 22nd Street, NY, NY 10011
212 691-4898 800 691-4898

URSA 4

TAPE HOUSE EDITORIAL 216 EAST 45TH STREET NYC, NY 10017 212-557-4949

LEARN TO SHOOT FROM THE MASTERS

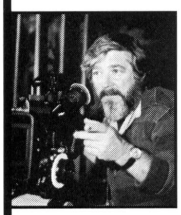
Kodak Cinematography Master Class Series

NEW! SHOOTING FOR DRAMA with Robby Müller and Peter James

NEW! SHOOTING FOR REALISM with Allen Daviau and Sacha Vierny

NEW! SHOOTING FOR FANTASY with Sacha Vierny and Denis Lenoir

NEW! SHOOTING FOR BLACK AND WHITE with Allen Daviau and Denis Lenoir



LOCATION LIGHTING with Geoff Burton

STUDIO LIGHTING: A COMPARATIVE WORKSHOP with Donald McAlpine and Denis Lenoir

LIGHTING DANCES WITH WOLVES with Dean Semler

LIGHTING DEAD POETS SOCIETY with John Seale

8 videotapes only

$279

$149 for any 4; $49.95 each

VISA/MC/AMEX (shipping and handling extra)

call today!

800-777-1576

First Light Video Publishing

phone: 310-558-7880 fax: 310 558-7891

For PAL orders, call South London Filter Ltd. at 011-44-171-620-3060

tion costs for the crowd scenes would have taken away from other line items in the budget, limiting us. We used the Paramount backlot for the largest of these scenes, the opening nighttime sequence depicting Day in a suffrage march which ends in her violent arrest. When you're working tight, every contribution and idea fits together. As the cinematographer, I consider the whole budget during preproduction. Otherwise, my ideas might be left out because someone else thinks they're too costly. The picture will suffer."

Co-producer Peter Burrell recalls one instance of Fash's imaginative use of a single set to shorten the 40-day shooting schedule. "Michael came to me and said, 'How much is it per day to shoot?' I told him it would be about $40,000. 'What if I could save you money at the other end by taking two days' worth of shooting and putting it into a better beach set for the Staten Island scenes?' Naturally, I said 'Good luck!', because I was convinced that the schedule was as pared down as possible. But Michael really wanted that set and convinced us that we could save time by shooting the scenes of Dorothy's exile to Staten Island all in one location."

Those scenes, set in 1928, were eventually filmed at Broad Beach in Malibu and at Placerita Canyon near Newhall, California, where an entire miniature facade was built. Fash's real-life set at Broad Beach made it possible to film all the interiors together, so that when Dorothy enters the house the cutaway could stay with her rather than edit to a studio shot.

Says Fash, "I told the producers, 'Give me fewer days on a beautiful set rather than extra days on two sets that don't quite work.' In the long run, having a unified place to shoot saved us money and gave the picture a bigger, more coherent look."

Production designer Rosen, noted for his work on *Taxi Driver* and *Broadcast News*, was also instrumental in giving Fash the look he was after. "There are some wonderful photographs of the Lower East Side by Bernice Abbott in the 1920s," he explains. "These were referenced by Illusion Arts for matte paintings. The matte shots work as 'bookends' to establish a sense of realism at beginnings and ends of street sequences. The shots are only a few seconds long, but they're critical to reinforcing in the audiences' minds the idea that we are somewhere other than a studio backlot."

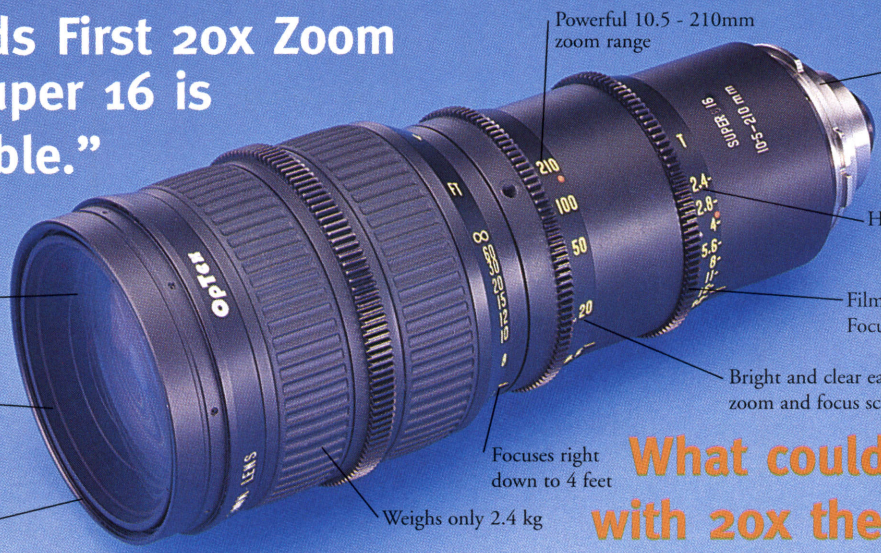
A remarkable number of donated services and reduced rates on film equipment, film, props, stages, and manpower allowed the picture to be completed on its modest budget. Several charity foundations and religious orders, along with Paramount, Warner Bros., Deluxe Labs and a host of vendors and suppliers, lent their support to the project.

The production also saved money on Fash's choice of film stock, the new Fuji Super X series film, which was released just weeks before principal photography in March. "Fuji was a big help," says Fash. "I am familiar with the film's qualities because I used it so often in Europe. The film we used on *Day* is something new called Fuji Type F. It has a considerably finer grain than the Fuji most people are used to. It also gives you a choice of stocks from 64 to 500 ASA, all of them matching in contrast. This meant less filter work and more time to run a single scene at different exposure levels under diminishing light. It saved time in two ways: first, there was less prep work to match film stocks, and second, we could work longer without having to worry about changing color or contrast."

Fash, much of whose work has been in English and American television, adds that Fuji is his film of choice for the small screen. "I first started using Fuji in the U.S. when they came out with the 250D. That was for an Emmy Award-winning television piece called *A Woman Named Jackie*. As you may know, television is where Fuji made its first big inroads into the American market because of its lower contrast, its range of emulsions in the new fine-grain technology, and, incidentally — something to please producers — its lower cost! Also, Fuji 250 has an especially low base density, which makes it easy to transfer to video."

Important Announcement

"The Worlds First 20x Zoom Lens for Super 16 is now available."



What could you do with 20x the power?

The all new OpTex Canon 20 x 10.5 Super 16 Zoom Lens is exclusive to OpTex

It's powerful, fast and built to last.

With a range of 10.5 - 210 mm and an optional 2x Range Extender also available, this exclusive OpTex Canon lens brings new power to your camera. The optics are not only very fast (T2.4) but they are of exceptionally high quality, and weighing only 2.4kg it's not going to slow you down. Available in Arri PI/Bayonet & Aaton lens mounts. It's the lens they're all going to be talking about.

With all these optional extras:

- **x2 Range Extender**
- **Image Stabilising attachment**
- **Precision Zoom Motor and Controller**
- **Manual Fluid Zoom Drive**
- **Studio Follow Focus Rig**
- **Super 16 Matte Boxes**

Call us today

(44) 181 441 2199

Fax: (44) 181 449 3646

OpTex®

THE SOURCE IN THE SOUTHEAST.

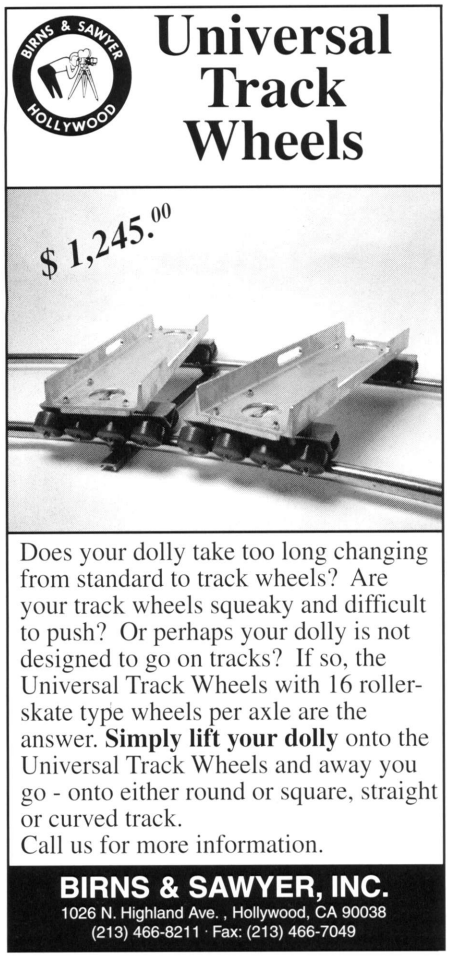
PANAVISION PANAFLEX PLATINUM

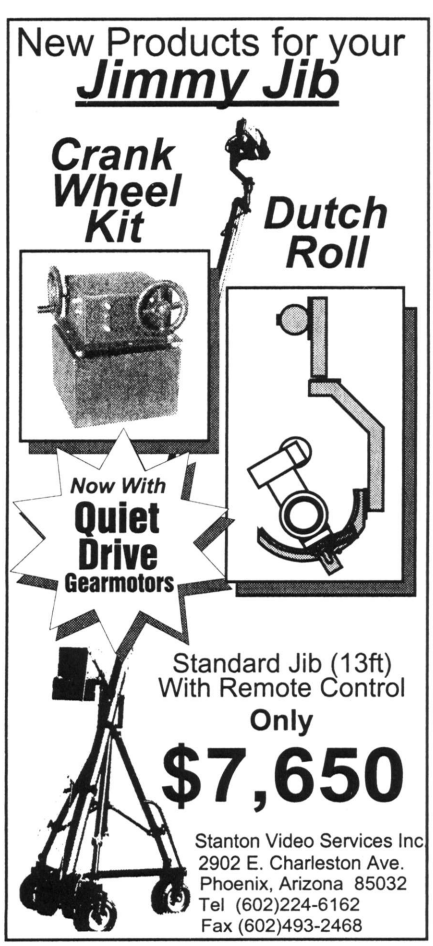
PANAVISION FLORIDA

® 2000 Universal Studios Plaza • Suite 900
Orlando, Florida 32819
(407) 363-0990 • FAX: (407) 363-0180
CAMERAS · LENSES · ACCESSORIES · LIGHTING · GRIP · TRUCKS · GENERATORS

PANAVISION WILMINGTON

® 1223 N. 23rd Street
Wilmington, North Carolina 28405
(910) 343-8796 • FAX: (910) 343-8275
CAMERAS · LENSES · ACCESSORIES


BIRNS & SAWYER HOLLYWOOD
Universal Track Wheels
$ 1,245.00
Does your dolly take too long changing from standard to track wheels? Are your track wheels squeaky and difficult to push? Or perhaps your dolly is not designed to go on tracks? If so, the Universal Track Wheels with 16 roller-skate type wheels per axle are the answer. Simply lift your dolly onto the Universal Track Wheels and away you go - onto either round or square, straight or curved track.
Call us for more information.
BIRNS & SAWYER, INC.
1026 N. Highland Ave., Hollywood, CA 90038
(213) 466-8211 · Fax: (213) 466-7049



Fash only strayed from the F-series stocks to make the New York scenes look cooler. "Toward the end of the movie, when Dorothy was making moral choices and times were bleak, I chose uncorrected tungsten-balanced film on our exterior New York set to achieve a cool, depressed feeling," he recalls.

The first day of shooting had all the rough spots one might expect, abetted by a singular location — the Starkman Warehouse in downtown Los Angeles. "Dorothy Day would have felt at home in this place," notes Rhodes. "It is in a bad section of town, and it's spacious and cheap. This was the type of building she would want for one of her Hospitality Houses."

"We were working in small spaces," says Fash, "stages built to look like the Hell Hole and the notoriously dark beer halls frequented by Day and her friends. Moving around that room for a 360-degree pan of the faces at the table was really tricky. It was very warm, full of smoke, and one of our most difficult shots. And that was just the first day."

Fash adds that at times such as these his working history with director Michael Rhodes gave the two filmmakers a handle on maintaining a calm and efficient set. "Michael and I shot 21 episodes of the CBS series *Christie* in 1993 and 1994, all on 35mm on location in Tennessee. It was a period piece, like *Day*, so not only did we learn about each other's working habits, we were able to bring some of the techniques we developed on that show directly to the feature."

Adds Rhodes, "Togetherness on the set is an outgrowth of filmmaking. When you put a bunch a talented people together and articulate an agenda for them, their tendency is to go after it. Your job as director is to frame that need and protect it. The same is true for Michael with the camera crew."

"I never assess blame," says Fash of his working methods, "because otherwise you scare people away from taking risks. The cast and the crew will say to themselves, 'We got in trouble last time we took chances, so let's not try.' The point is to encourage risk. This means, necessarily, accepting mistakes as a process of people trying to do their best. Often our best work is when we are pushed to our limits and the adrenaline is flowing. Who does not like a challenge?"

From a technical standpoint, the two Michaels developed a hidden language about when to open the shot, pull back, let the actors work things out for themselves, or offer a criticism to each other in front of crewmembers. "We developed ways of saving the day whenever necessary — a natural rhythm between us when we knew we were under pressure but did not want to be explicit. You don't want to remind people that this might be the last day on a particular location, or that there's no money for reshooting. You just go for it and give them the security to do their jobs well. If you are genuinely enthusiastic about the project your enthusiasm will be contagious."

Fash studied math, physics and photography at London University, and later portrait painting at Richmond Art School. After being selected for the BBC's training program, he worked for eight years as a cameraman there, shooting features, documentaries and shorts. The youngest member inducted into the BSC, he received two BAFTA awards and two nominations. He later became friends with Vittorio Storaro, ASC while the famed Italian cinematographer was filming *Reds* at Pinewood Studios in 1980. "I was on the next stage shooting for *Britannia Hospital*, a feature directed by Lindsay Anderson, and we spoke a lot about period lighting, swapping ideas. I had been brought up shooting films set in the Ninteenth Century."

In addition to Storaro, Fash counts Gregg Toland, ASC as one of his influences. "I believe these two have, and had, a commitment to story without ignoring the craft of photography. Their skills are obvious, but they don't call attention to themselves. Their accomplishments are unassuming, like the best lighting — subtle."

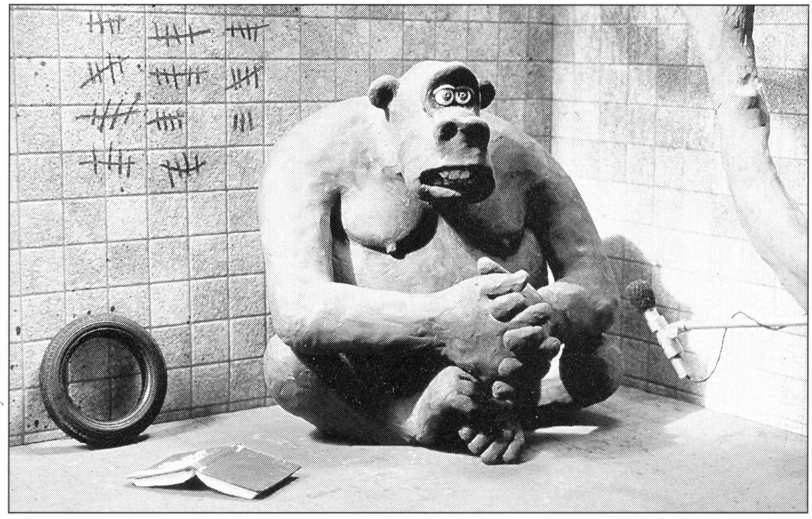
Aardman Animations: A Perpetual Stop-Motion Machine

The Academy Award-winning creators of *Creature Comforts* and *The Wrong Trousers* take a hands-on approach to their craft.

by John Gainsborough

TO FANS OF ANIMATION, THE LINE "I juss gotta have my ah-space" immediately conjures up a smile of recognition. The characterization of an ennui-ridden jungle cat lounging on a fake tree limb in a desultory zoo exhibit, along with mock-documentary interviews of the other resigned inhabitants of an obviously underfunded institution, quickly made *Creature Comforts* one of the most popular animated films of the past decade.

That film, first shown on Britain's Channel 4 in 1989, and *The Wrong Trousers*, commissioned by the BBC as a Christmas program in 1993, both won Academy Awards for Best Short Animated Film for director/animator Nick Park, and are among the best-known works of Aardman Animations, the studio co-founded in 1972 by then-students David Sproxton and Peter Lord. Having subsequently appeared in electricity commercials for British television, the animals in *Creature Comforts* — as well as Wallace and Gromit, the main characters in *Wrong Trousers* — have become quintessential icons of the Nineties. Quirky, humorous, and unmistakably British, they spring from a line of inventive animations created by the duo of Sproxton and Lord.



Photos courtesy of Aardman Animations Ltd.

***Expounding a preference for a warm climate and rain-proof accommodations to her current prison-like living situation, a gorilla vents her frustrations in the hilarious short* Creature Comforts.**

Their first Plasticine characters to achieve fame was Morph, originally seen in a BBC series for deaf children called *Vision On*. The simple, stop-frame tabletop figure was later featured in 26 five-minute episodes of a series titled *The Amazing Adventures of Morph*, made between 1981 and 1983.

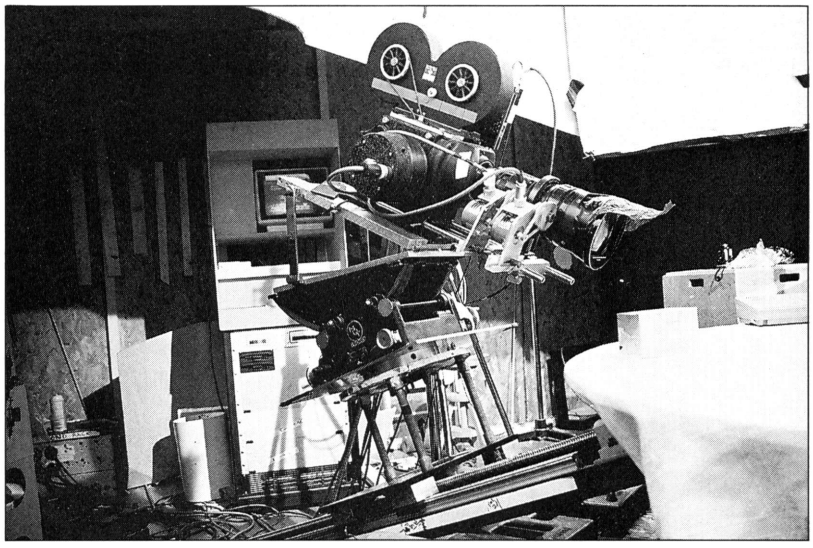
Sproxton and Lord's earliest animations were shot with slow-speed 16mm stocks and a wind-up Bolex; for the *Adventures* series, they traded up for another model with an electric stop-frame motor, bayonet mount, and an Angenieux 10:1 zoom. "The camera was limited to a 1/10-second exposure, but we managed," recalls Sproxton, who since the beginning has been largely responsible for technical development at Aardman. "There were two years when we did nothing but Morph. In a way we were almost Morphed-out. But we are still using him as a training ground. It's a great way for young animators to put short ideas across in a very simple character with a lot of expression."

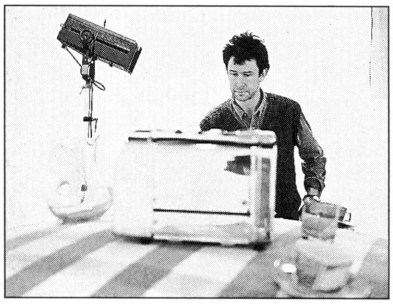
It was while working on these early programs for BBC Bristol that Sproxton and Lord were introduced to the concept of using documentary-style, real-life soundtracks, which became the hallmark of their productions. (At a conference in 1994, Peter Lord maintained that it is an incomparable way of achieving spontaneity.) Recalls Sproxton, "Bill Mather, who was then in graphics at the BBC, had done a pilot called *Audition* for the General Programmes Unit. This featured his son going for a choir audition, and out of that we started using real-life soundtracks as well, initially for *Animated Conversations* in 1978: *Down and Out* and *Confessions of a Foyer Girl*.

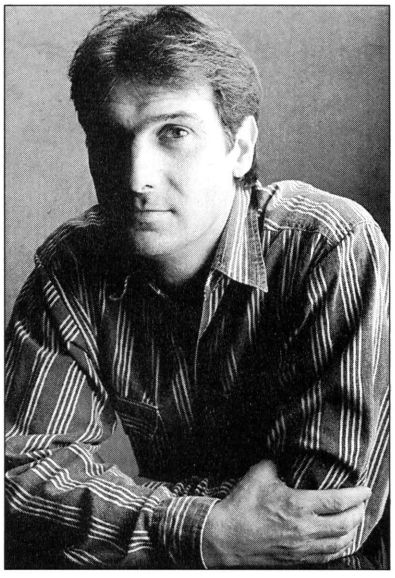
After Jeremy Isaacs, the first director of the then-new Channel 4, saw these works, the broadcaster commissioned a series of five-minute films called *Conversation Pieces* (1981-1983), all based on real-life audio. They were followed by another series for Channel 4 under the generic title *Lip Synch*, which included *Next*, *War Story*, and the justly-renowned entry *Creature Comforts*.

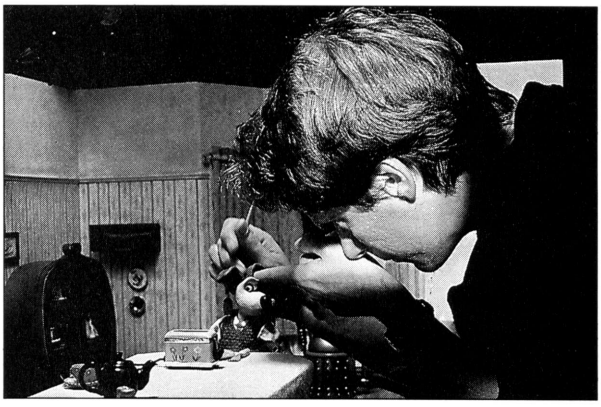
War Story was animated to an edited audio interview with a retired aircraft worker at de Haviland, and concerned his experiences during the war. The animators never met the man, Bill Perry, until he was invited to the premiere of the film. It is said that he bore an extraordinary resemblance to the character they had created.

The series was a turning point for the company, and in that same year Aardman helped complete









The animators' workhorses are vintage Mitchells such as this S35 Mk 11 (top), fitted on a Moy head and linear bearing ramp driven by a Mark Roberts motion control computer. The camera's Cooke 5:1 zoom, with stepper motors made by Aardman, is also controlled by the Roberts system. The Aardman team includes Jeff Hewett (top right, working on a German commercial), Nick Park (bottom right, working on* The Wrong Trousers*) and co-founder David Sproxton (near right).

Nick Park's college project, *A Grand Day Out*, originally produced by the National Film and Television School. Its debut marked the first appearance of the characters Wallace and Gromit. Soon after, Park joined Sproxton and Lord, who by then had completed several animated pop music promos, sequences for television programs as varied as the *Pee Wee's Playhouse* in New York and *Spitting Image* for Central Television, and contributed work to charity fundraisers for Comic Relief and Amnesty International. Their work was also coming into demand for commercials, starting in 1984 with a spot for American Express. To date the studio has produced over 370 minutes of material and 105 commercials, the latest for Chevron gasoline (in the U.S.), Cuprinol and Lurpak butter.

"We thought animated commercials would be a very brief fashion," admits Sproxton, "but there has proved to be a continuing demand, and basically it has funded the studio."

With their success they invested in new space in the old Bristol Docks area. And by this time Sproxton had been doing anything and everything on Aardman's many projects.

"I would like to think of myself a cinematographer," he says, "although these days I get less and less chance to light productions. I shot *Morph*, I did a lot of commercials, and I did all the *Conversation Pieces* and a lot of the *Lip Synch* work. I enjoy it and still keep an eye on it, particularly with some of the people new to animation. But with so much work coming through the studio now, I often find myself in the role of executive producer."

Sproxton, now 41, studied geography at Durham, while Lord studied English at York. "Neither of us has any formal training in what we do," Sproxton points out. "But my father [Vernon Sproxton] was a documentary producer at the BBC, so there was always a Bolex in the cupboard and a darkroom at home. I did a lot of photography back then; it's sort of in the blood."

Many of Sproxton's lighting techniques developed from his extracurricular experiences at Durham. "I did a lot of theater lighting at Durham, mainly drama, and you can a great deal about creating mood and emotion on a box stage. Though I was basically teaching myself, I learned a great deal about atmosphere and the emotional aspect of color."

He also became quite familiar with theater luminaires, particularly profile lanterns, which he likens to searchlights or projectors. "They produce very hard edges and are designed to throw a tight beam a very great distance," he explains. "They have a twin lens arrangement and a gate in which you can put gobos to throw patterns. They also now have a zoom effect with, typically, a beam spread range of between 16 and 30 degrees or 28 and 40 degrees. From my experience in the theater, I realized that with small sets — most of our sets are to ⅙ scale, so a male figure may be around ten inches high — you actually want the lamps to be as far away from the animator as possible, but still very, very controllable. So we use these theater lanterns, five or six feet or farther from the set, with no flags,

with good control. And you can diffuse them if necessary."

He also finds it an advantage in stop-motion animation to use lanterns which have been designed to hang in a theater for weeks. Such standard fixtures are easy to re-lamp and have a very simple disc-brake system for adjustment. He also lauds another recent lighting development, noting, "About five years ago shops started using miniature 12-volt versions of these profile lanterns, with 75-watt bulbs. They are made by two or three manufacturers and we use them extensively because they are small, very controllable with a relatively high output, and don't require flagging."

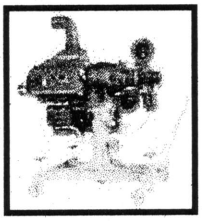
It was largely commercial work that pushed Sproxton into a more sophisticated approach to lighting. The new techniques had an immediate effect on the production of *Conversation Pieces*. "You are putting a story over," he says. "The atmosphere is part of it and you want to see the characters and the sculpting of the faces. With that, and the commercials, we were striving to get something which looked really good, with a much more 'finessed' look. That was also when we started to shoot on 35mm, and we realized just how much more detail it records. We first rented a Newman Sinclair, a P40 and a rather bizarre hybrid, and we also rented Mitchell S35s from time to time. We soon realized we had to buy a Mitchell S35, which we eventually did. We also bought 5:1 and 10:1 Cookes, a set of primes and other [equipment]."

With the move to 35mm, the team found that depth of field became much more critical; they now frequently stop down to 11 or 16, and they regularly use long exposures of between one and six seconds to avoid using an excessive amount of light. The single, 1/10-second exposure provided by their original Bolex is a thing of the past (though it's still in use); as Sproxton notes, the Mitchell provides so much control that using it is almost like shooting with a still camera.

The animators record their work on the slow Eastman 5248 stock, but never rate it at its official speed of 100 ASA. "This is the beauty of stop-frame," says

Mitchell Process Projection System Rentals

We are pleased to make available for rental and leasing our Mitchell 35mm Process & Background System.



Location Screen Services World-Wide

Choose from a wide selection of 16, 35 & 70mm standard projection or interlock systems. Screens up to 40' in width in stock. We supply ***Magna-Tech*** and other fine sound gear.

Dealers for Dolby, Strong, Christie, EV, Altec, JBL, ISCO, Schneider, Simplex, Westar, & Magna-Tech.

INTERNATIONAL CINEMA EQUIPMENT COMPANY, INC.

100 N.E. 39th Street, Miami, FL 33137 USA

Phone (305) 573-7339 / Fax (305) 573-8101

GO HIGHER

with the NEW

oconnor

LIGHTWEIGHT

25L

CARBON FIBER 2 STAGE TRIPOD

66" to 15"

The new OConnor 25L Carbon Fiber 2 Stage Tripod goes Higher, gets Lower... and is Lighter and more Stable than any comparable tripod in the known universe. Beam one up from your OConnor dealer!

oconnor

PROFESSIONAL CAMERA SUPPORT SYSTEMS

GET LOWER

100 Kalmus Drive, Costa Mesa, CA 92626

Tel (714) 979-3993 - Fax (714) 957-8138

GET IT TOGETHER...

WITH A SCRIPT PAK FROM NALPAK!

This versatile organizer is ideal for the detail oriented executive. There is a pocket for everything! From candy bars to cell-phones, the SCRIPT PAK has a place for it.

Swivel Key Holder
Carry Strap
Optional Periscope Light
Secretary on Back
2 1/2" Built-in Binder
Pen Holders
Comfort Handles
Made of Durable 1000 denier Cordura Nylon

NALPAK
1937-C Friendship Drive • El Cajon, California 92020
(619) 258-1200 • FAX (619) 258-0925

Single Frame Motor & Intervalometer for Arri 16 SR

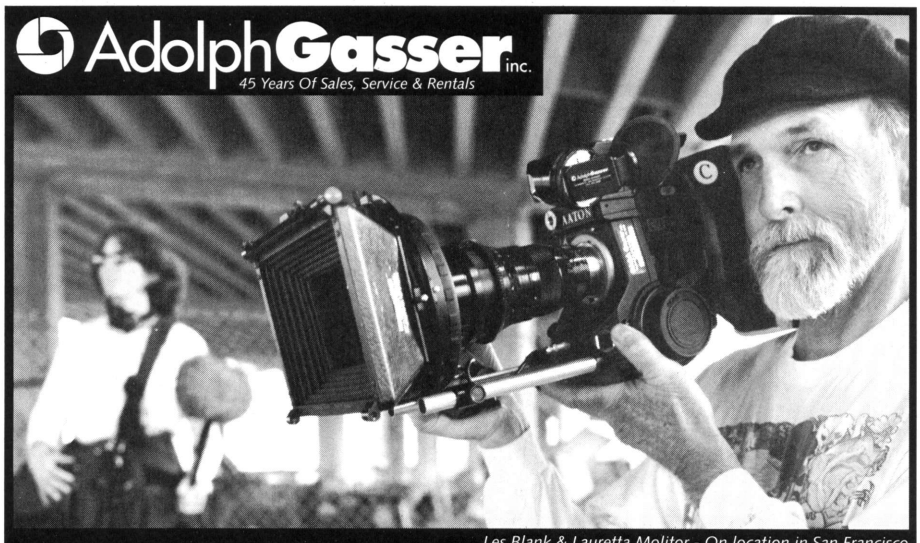
- 12 to 24 VDC power.
- Crystal shutter speeds – 1/16 sec. to over 8 min. time exposure
- Intervals from 1 fps to 60 hrs.
- Burst feature 1–15 frames per pulse.
- LED frame counter.
- Foreword/reverse operations.

ALSO SYSTEMS FOR: Aaton, Arri S&M, Arri 35IIC, Arri 35III, Bolex Rex 4 & 5, Eclair ACL, Mitchell 16mm, Mitchell S35R MKII, Mitchell 35 HS, Mitchell BNC, AP65mm, Imax, Vistavision

NORRIS FILM PRODUCTS
1014 Green Lane • La Canada, California 91011
Phone: 818-790-1907 Fax: 818-790-1920

Adolph Gasser inc.

45 Years Of Sales, Service & Rentals



Les Blank & Lauretta Molitor - On location in San Francisco

Now Available From Our Rental Services Division

AATON XTR with Timecode

Full Camera Packages
ARRIFLEX - AATON - CP
35mm - 16mm - Super 16
Cameras - Lenses - Support

Lighting & Grip
Tungsten - HMI
Dollies - Cranes
Generators

Location Sound Packages
NAGRA IV STC - NAGRA 4.2
DAT Recorders - Microphones
Mixers - Playback Speakers

Expendables
Film - Tape
Gels - Lamps
Editing Supplies

750 Bryant Street • San Francisco • 800 994-2773 • Tel 415 495-3852 • Fax 415 543-3438

Sproxton. "You have the scope to vary exposure, which you would not have with live action. We rate the 5248 at anything between 50 and 84 ASA; I've even rated it at 40 ASA and overexposed it. By giving it that extra bit of exposure you get the best out of it, without a doubt. At 40 or 50 ASA it becomes really silky. The color saturation comes out and the shadow detail becomes extraordinary; you can print down to get very strong shadows. We have found that as you stop down and your exposures get longer, there is a slight color shift, but I don't know if we are getting less color aberration through the lens or hitting reciprocity on the film. The film certainly behaves in a slightly different way. And with a denser negative you can actually pull more out of it if you need to."

Sproxton jokes that the animators are probably using the oldest cameras in the country: almost all of their cameras are American Mitchells, Mark 11s, S35s or BNCRs. He favors the BNCRs, which he considers beautifully engineered, and possibly better-engineered than the later S35s. Most of Aardman's Mitchell BNCRs were made in the 1930s, and the company has kept track of the history of all of them.

"Probably every ten years of their life they have been modified," explains Sproxton. "They may have started as rack-over, then they went reflex or they were put in a sound blimp. Later they may have had sync motors put on and video assist for American usage in studios. A lot of the cameras we have came from CBS, where they would have shot shows like *I Love Lucy* or *Bilko* on a three- or four-camera setup with crude video assist and 1,000-foot film magazines — television-style shooting, but with film cameras.

"When you come across these cameras you find that they are in sets of three or four; we recently bought 11 — three of one type, three of another and so on. And you know, however old, the gates will always be spot on. We put regular 400-foot mags on the cameras, rebuild the video assist to provide a low-light, high-quality color image, and change some to provide orientable viewfinders.

We put our own stop-frame or live-action motor on them and rebuild the bottom of the body so that they fit onto Arri slide plates. They will also now take the Arri matte box and our own lens drives. They are behaving extremely well and we are very pleased with them."

Because stop-motion animation requires absolutely stable cameras, the units are locked down on old, heavyweight Vinten dollies, with wedges under all the wheels and glued to the floor. Even flags are braced, and the gels are positioned further out to prevent any possibility of them burning during shots.

The technical ethic at Aardman is highly traditional, with a distinct emphasis on real film craft. The visual equivalent of a one-liner will take days to make; a cameraman and animator often average no more than three seconds of material a day, and it is precise, painstaking work. They work strictly to detailed storyboards, but in many cases shots have to be taken out of sequence; maintaining continuity is a constant problem.

The video assist now records directly onto hard disk using a personal animation recorder running on Amiga computers. The system enables the animators to recall any shot at will from a frame store and cut it into a previous shot or shots. Daily film rushes are essential, particularly for adjusting lighting on out-of-sequence shots, and while the animators do use light meters, a great deal is done by eye from original test material, which includes gray scales.

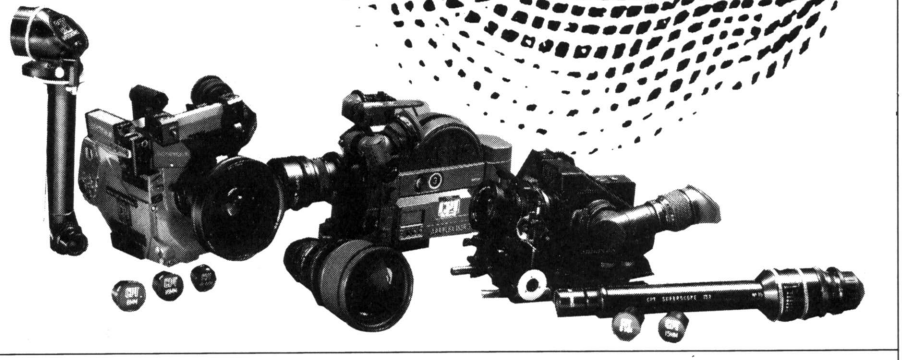
As Dave Ridett, director of photography on many of their productions, says, "Any slight changes have to be done so quickly that we tend to tweak by eye. Once we've got the main lights there, we know what the reading is, so we run a test and go by that test. Sometimes there isn't even time to do a test, and we have to jump straight in, even if it's a new scene."

In the end, size is all with these productions. "You have got to get the animator in [the set,]" Ridett points out. "I am always being asked, 'Hey, how am I going to get in to animate this?' The perfect place to put the lamp is exactly

The Discerning Eye Knows the Difference

Well maintained, checked and double checked.

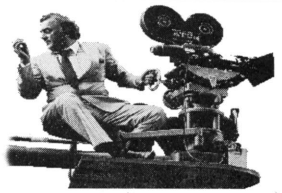
MOVIECAM, ALL ARRIFLEX, MITCHELL FRIES, PHOTOSONICS HS 35mm & 16mm CAMERAS, UP TO 2500 FPS WITH UNILUX LIGHTING, SUPERSCOPE & SUPER SNORKEL LENS SYSTEMs, SWING & TILT LENS SYSTEM (Also available at Clairmont Camera, Inc.)



ROUSSEL CPT ONE PHOTOTECH FOR RENTALS

IN NEW YORK: (718) 424-1600 48-20 70th St., Woodside, NY 11377
IN ATLANTA: (404) 223-5007 101 Krog St., Atlanta, GA 30307

LEARN FILM MAKING



DIRECT • WRITE • SHOOT • EDIT

YOUR OWN SHORT FILMS IN OUR HANDS-ON EIGHT WEEK TOTAL IMMERSION WORKSHOPS FOR INDIVIDUALS WITH LITTLE OR NO FILMMAKING EXPERIENCE.

SPECIAL SIX WEEK SUMMER WORKSHOPS AT
PRINCETON & YALE UNIVERSITIES

LEARN CONCEPTS OF STORY, DIRECTING, CAMERA, LIGHTING, SOUND AND EDITING IN AN INTENSIVE YET SUPPORTIVE ENVIRONMENT. WORK WITH 16MM ARRIFLEX CAMERAS IN SMALL CLASSES DESIGNED AND TAUGHT BY AWARD-WINNING INSTRUCTORS. TUITION $4000

NEW WORKSHOPS START FIRST MONDAY OF EVERY MONTH IN NEW YORK CITY ALL YEAR ROUND.

NEW YORK FILM ACADEMY
100 EAST 17TH STREET NYC 10003 TEL: 212-674-4300 FAX: 212-477-1414
New York Film Academy Web Page: http://www.inch.com/~nyfa

POGO CAM

POGOCAM "Captures the Action"

THE ALTERNATIVE
Body Support System

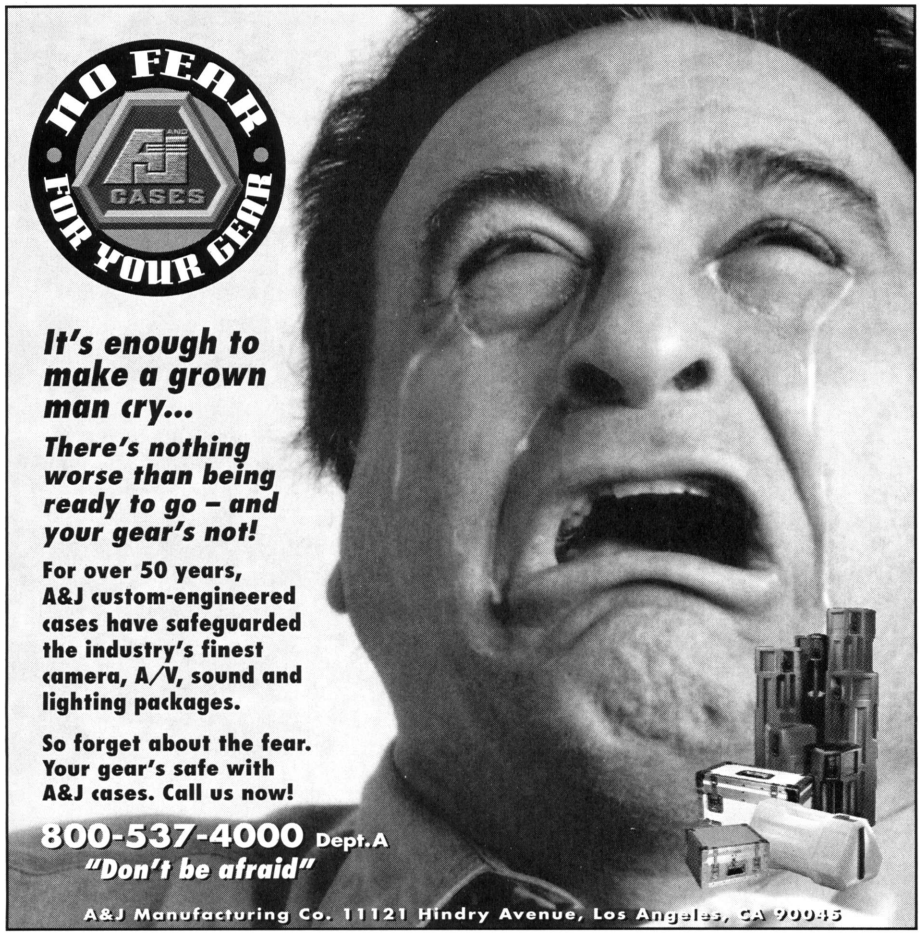
GEO FILM GROUP
7625 Hayvenhurst Ave. #46
Van Nuys, CA 91406
818-376-6680 ■ FAX 818-376-6686

News From Steenbeck!

We now have a *new* Larger Screen for 1:1.85 and Super 35

STEENBECK®
Film • Audio • Video

Sales • Rentals • Service • Parts
Steenbeck, Inc. • 9554 Vasser Ave., Chatsworth, CA 91311 • Tel: 818/998-4033 • Fax: 818/998-6992


NO FEAR
FOR YOUR GEAR
A&J
CASES
It's enough to make a grown man cry...
There's nothing worse than being ready to go – and your gear's not!
For over 50 years, A&J custom-engineered cases have safeguarded the industry's finest camera, A/V, sound and lighting packages.
So forget about the fear. Your gear's safe with A&J cases. Call us now!
800-537-4000 Dept.A
"Don't be afraid"
A&J Manufacturing Co. 11121 Hindry Avenue, Los Angeles, CA 90045

where the animator needs to go, and it is something you have to bear in mind the whole time. It is so different from live action, where you know the actors are going to walk around or sit down, and the spatial requirement is just so much bigger. Here the physical space is much smaller, but the animator — like the actor — is the same size."

The Aardman teammates like to do their own in-camera effects where possible. One traditional technique used at the studio is false perspective, which can be an enormous help with the depth-of-field problem. This approach makes a lot more of the scene appear to be in focus, although such sets have to be carefully mocked-up and tested in advance.

Although not entirely sold on it, the studio also uses computerized motion control. However, while shooting a chase sequence for *Close Shave*, their latest Wallace and Gromit production for the BBC, they opted instead for a low-tech approach. First, they locked the characters and the model truck to the camera, which was positioned on a dolly. As the camera was moved along manually, the shot was given a two-second exposure, leaving the background suitably blurred.

"It was all done by hand," says Ridett. "You start pushing the dolly, press the remote trigger, and you can just about time it so that you get a six-inch movement within the two seconds of exposure time. We found that you get a lot more energy in the footage, because it is slightly random and looks more exciting. This technique provides a different emotional effect; when we tested the shot on a computerized motion-control rig, it was just too smooth. It didn't have any sense of excitement. So it's back to basics — eye and hand — for us.

"The movement in animation is not real, and you're not using real sets, so if you get too precise about it there won't be any life. The reality and energy are achieved by doing things by hand. It's the imperfections that make it [come to life.] It's like music: if you're off a beat now and then, it swings!"

Top of the Charts

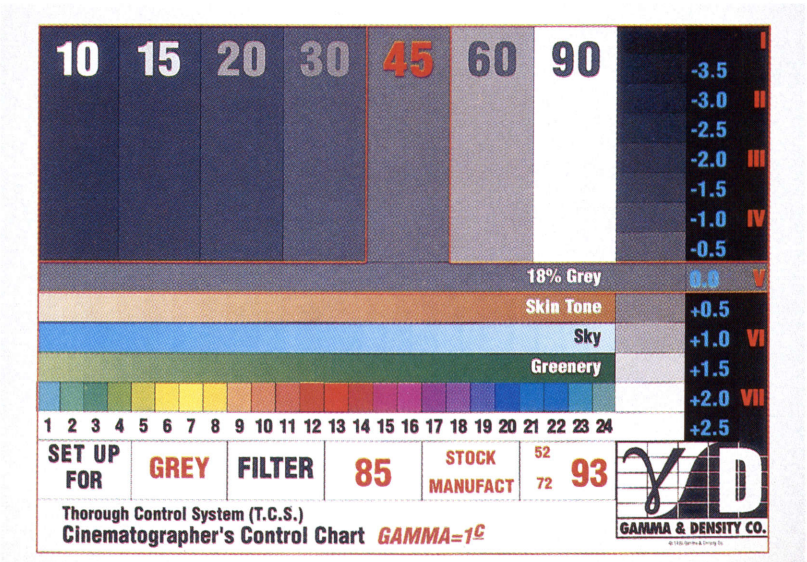
A cinematographer-designed gray scale/color standard helps retain the cameraman's original intent by giving the telecine operator what he needs to know.

by Russell Steen

Cinematographer Yuri Neyman studied at Russia's top film school, VGIK, the State Institute of Cinematography in Moscow, a school that puts its own particular stamp on its students — its graduates can not only use film equipment, they can repair it. In Russia, few things manufactured could be counted on to perform consistently, so much of the training for cinematographers was dedicated to discovering what could go wrong and how to fix it yourself. When Neyman immigrated to the U.S. in 1978, he marveled that his American counterparts could take most things for granted: film stock, cameras, lenses and labs were expected to perform perfectly, and if they did not, you simply replaced them and someone else worked on fixing the problem.

Neyman's subsequent work was profiled by *American Cinematographer* in February, 1984 (*Liquid Sky*); August, 1988 (*D.O.A.*); and March, 1993 (*Marina's Story*).

In 1993, Neyman began shooting the NBC movie of the week *Scattered Dreams* and found himself working with video dailies, an experience which created a strong feeling of déjà vu for the cinematographer, reminiscent as it was of his early days shooting in Russia. He would complain about the inconsistent picture he saw on the video monitor each day, only to be reassured that it would be "fixable" during the on-line transfer. Unfortunately, the footage — transferred overnight and unsupervised — was used to cut the final product, and Neyman felt that his role as the cinematographer had been compromised.



Because of his education, Neyman knew exactly what could go wrong in a lab, but the State Institute hadn't prepared him for video transfers. So he did what he was trained to do: he went to telecine houses to learn how the process worked so that he could fix the problem himself.

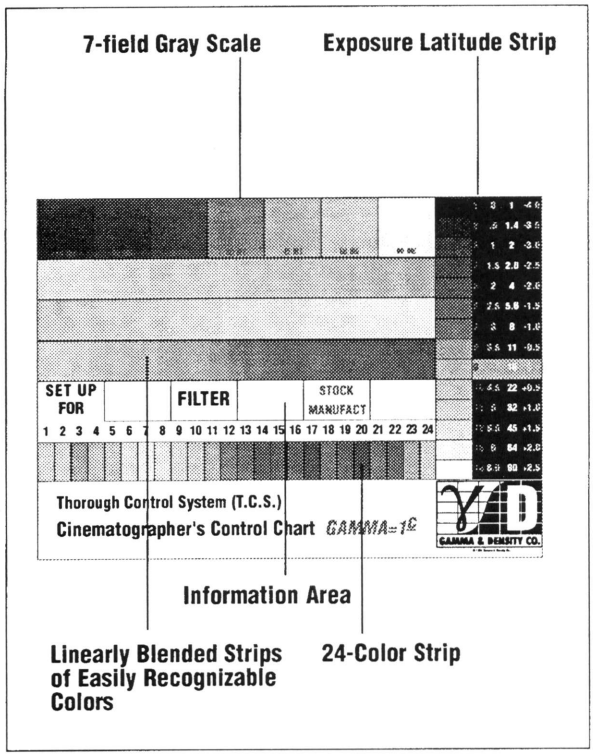
At first, Neyman was simply attempting to gain control over his own work, because he realized that video dailies were becoming the norm for many productions. But as he began to talk to engineers, colorists, and fellow cinematographers, he recognized the need for a system of image control for cinematographers during the film-to-tape process.

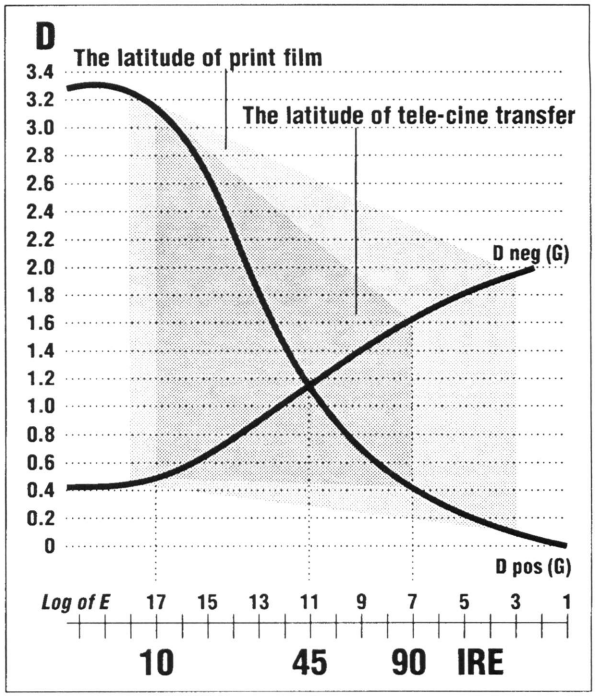
Asked to explain the problems of telecine transfers, Neyman replies, "For film we think in terms of gamma, contrast, luminance, exposure, density, etc. These are the elements of technical and artistic control, and they are all measurable according to strict standards. For video, the parameters are completely different, and there are no standards for translating film parameters into video parameters. In fact, other than 100 IRE for white and 7.5 IRE for black, there are no video standards for gamma, contrast, or color.

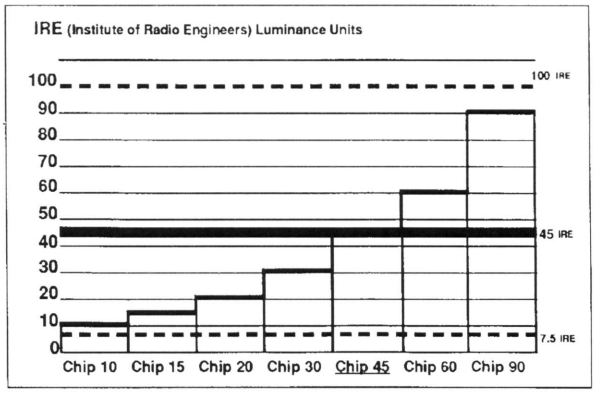
"During a film-to-tape transfer, the main tool used to ensure the correct color is the video monitor. But it is well known that most professional edit and transfer suites have only one color monitor because it is impossible to have two that are alike. If that isn't disturbing enough, when your negative is being transferred overnight, the colorist isn't likely to have a lot of experience; the most knowledgeable people are often doing on-line or tape-to-tape corrections during the day. But this nighttime colorist is going to have to make aesthetic decisions that will be seen by everybody who watches the dailies. Let's say the first day's dailies come back a little brighter than you wanted, but acceptable. The next day, your telecine bay is used by a rock video director who shot everything three

The completed Gamma & Density exposure chart incorporates the calibration standards of both cinematographers and video colorists, helping to ensure accurate transfers.

Near right: ***The chart's various components address questions of exposure, color, and density.*** **Far right:** ***Video's IRE unit latitude as interpreted by a waveform monitor, compared to film's density signature. Neyman found the need to translate between these two measurement systems vital to the chart's success, resulting in his interpretive IRE chip bar graph (below right) and the completed 7-field Gray Scale running atop the chart.***


7-field Gray Scale
Exposure Latitude Strip
SET UP FOR
FILTER
STOCK MANUFACT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Thorough Control System (T.C.S.)
Cinematographer's Control Chart GAMMA=1.0
GAMMA & DENSITY CO.
Information Area
Linearly Blended Strips of Easily Recognizable Colors
24-Color Strip





stops over and wanted a pale green tint. The daytime telecine colorist cranks all the controls until the guy is happy. The session goes three hours over and the daytime colorist takes off. The person transferring your dailies is now three hours behind schedule and has to try and return the system to the previous day's settings before starting with your negative. Even if he recorded every setting, video equipment is subject to 'drift,' so there is no returning to the exact same place. At some point he decides it's 'close enough' and lets it roll. The next day the executive producer calls the producer, who calls the director, who comes running to you to ask why the lead actress's baby-blue eyes are pale green and if you know what you're doing. I tell you, when I discussed this with other cinematographers I heard crazier stories than this!"

Neyman adds, "It doesn't make sense to go through the painstaking process of getting the image just the way you want it — the image they hired you for in the first place — only to give up control over your image during the video transfer. There are some good colorists out there who will work hard to make sure you're getting what you want, but if you're not there during the transfer, they're going to be making decisions that affect your work."

Neyman decided to take matters into his own hands by developing a new gray scale/color chart to help control results in a such situations. Sacha Riviére was Neyman's first camera assistant during the production on which the cinematographer experimented with the first version of his chart. As Neyman explained what it was for, Riviére offered to help with the research. Together they formed the company Gamma & Density, Inc. and continued meeting with telecine colorists, video engineers, and lab timer-colorists while refining versions of their new chart.

"The first problem I wanted to solve was translating the language used for the printing process into video equivalents. For the film people, luminance, or the brightness of the scene, is expressed as exposure, which is measured as density according to strict standards," explains Neyman. "For the video people, luminance is measured in IRE units on a waveform monitor. IRE units apply to every video signal in every standard. The gray scale we created has IRE numbers printed on each gray chip. This simple step, which had never been done before, means that the known densities of the negative can be expressed as IRE values on video. We designed the chart to match the resulting gamma of the film to the psychologically identical contrast on video. Using this gray scale, the colorist can quickly set up for the correct contrast without having to guess."

The next hurdle was finding a way to accurately match the color rendition of film to the video image. Toward this end, Neyman and Riviére worked on ways to create a color chart which could

match the reference settings on a vectorscope (the instrument used to measure the hue and saturation of color on video). They discovered that the SMPTE color bars used to set up video monitors were electronically generated, and that it was impossible to print a version of them that would be acceptable as a control tool. Riviére points out, "We got a printed chart from SMPTE, but it wasn't even close. And we know why after our own efforts to print colors that would match the vectorscope settings."

After much trial and error, they discovered that the color red could be printed on a chart and filmed with a hue and saturation to match the red fine reference box on a vectorscope. Notes Riviére, "This would help set up the transfer equipment according to the film stock's spectral sensitivity before making fine adjustments. Without this reference, the best you could do was to roll to a color chart or a scene on the film and then guess."

In discussions with both the lab timers and telecine colorists, it was evident that they depended upon common color references for fine adjustments. Neyman's education had included the study of color perception, and he knew that there was little agreement about how most colors are perceived. However, there are a few colors which are readily agreed upon because of their commonality for all cultures. From these colors, skin tone, blue sky and greenery were selected and dubbed as Easily Recognizable Colors. These ranges of colors were already being used by most lab timer-colorists and telecine colorists, so they were incorporated into the system as gradated bands on each chart.

A different gray scale with half-stop increments was added to the chart to serve as an Exposure Latitude Index. Explains Neyman, "I was doing some stock tests and made a gray scale in half-stop increments to determine what over- or underexposure does to the latitude of each stock. While creating this new chart system I realized that an Exposure Latitude Index gray scale is also a great way to determine the practical latitude of the video transfer or the print pro-

ZGC for Optex in USA

We have the Abakus adapter that lets you use the four high-resolution, internal-focus Canon zooms for 16 and Super 16 as well as for 2/3 inch Video. We also have the Optex Super 16 and other conversions, adapters and lensmounts.

Cooke ZGC INCORPORATED

264 Morris Ave, Mountain Lakes, NJ 07046. Phone: (201) 335-4460. Fax: (201) 335-4560

ATTENTION- PRODUCTION PROFESSIONALS

All Magliners are "born" in Michigan. When they arrive at Nalpak, specialists retrofit each truck with features not found elsewhere. *Now* the Magliner is a PROFESSIONAL!

LOOK FOR THE NALPAK LOGO!

NALPAK

5" LOCKING CASTERS

10" TUBED BOLT-TOGETHER HUB

PRE-DRILLED FOR FUTURE ADDITIONS

SAFETY LOCKING PIN

1937-C Friendship Drive • El Cajon, California 92020
(619) 258-1200 • FAX (619) 258-0925

The only source to purchase a professional Magliner, or visit an authorized dealer

Electronic Cinematography

Digital Betacam

FLETCHER

Sony DVW-700

See it . . .
Learn it . . .
Rent it
with Film Style Accessories

Fletcher Chicago · 1062 W. Huron Street · Chicago, Illinois 60622
312-226-2223 or Fax (312) 226-7281

PERA
PRODUCTION EQUIPMENT RENTAL ASSOCIATION

AMERICA'S PREMIER BOLEX DEALER

BOLEX SUPER 16/NORMAL 16

H16 SBM Camera with the Vario-Switar 14.5-115mm auto/manual exposure power zoom w/7,5mm Aspheron Wide Angle

(Special Combo Price) $15,895

BOLEX CAMERAS

H16 EL Camera 13X VF/TV Cutoff, Chgr, Bat.	$ 8421.00
H16 EL Camera pkg Super 16 & Normal 16	$ 11558.00
H16 RX5 Camera 13X VF/TV Cutoff Mask	$ 3883.00
H16 SBM Camera 13X VF/TV Cutoff Mask	$ 3757.00
H16 SBM Camera Super 16 & Normal 16	$ 6894.00

KERN *MC* PRIME LENSES

10mm f1.6 Switar Rx PD Multicoated "C"	$ 1499.00
10mm f1.6 Switar Rx PD Multicoated "Bay"	$ 1592.00
*5.5mm Multicoated WA Aspheron f/PD 10mM	$ 1685.00
6mm Century WA f/Early 10 $377.50 & PD 10mm	$ 350.00
75mm f1.9 Macro-Switar PD Multicoated "C"	$ 1885.00
75mm f1.9 Macro-Switar PD Multicoated "Bay"	$ 1977.00
Bolex Bayonet-Mount to C-Mount Adapter	$ 115.00

KERN ZOOM LENSES

Multicoated w/6.5 or 7.5mm Aspheron

12.5-100mm f2.0 Vario-Switar PTL MC "Bay"	$ 6595.00
14.5-115mm f2.3 VS PTL (Super/Normal-16) B	$ 9416.00
12.5-100mm f2.0 Vario-Switar PTL MC "C"	$ 6948.00
*12.5-100mm f2.0 Vario-Switar MC "Bay or C"	$ 4897.00
*14.5-115mm f2.3 VS (Super/Normal-16) "Bay"	$7718.00

EL/EBM/ESM ACCESSORIES

NiCad Battery Pack 12V/0.8Ah with Cable	$ 557.00
NiCad Battery Pack 12V/1.2Ah w/o Cable	$ 543.00
NiCad Battery Pack 12V/1.2Ah with Cable	$ 628.00
NiCad Battery 12V1Ah for EBM/ESM (USA)	$ 199.00
NiCad Battery Charger Overnight	$ 143.00
NiCad Battery Charger from Auto/Boat 12V	$ 272.00
*NiCad Battery Charger Rapid (Not for DEAC)	$ 795.00
Power & Release Cable for EBM/ESM	$ 166.00

EL/EBM/RXACCESSORIES

400' Magazine with Film Cores Included	$ 799.00
400' Magazine for Super-16 & Normal 16	$ 1077.00
WM Mag Motor f/All EM, Some ESM, EL, EBM	$ 543.00
*MM Mag Motor f/All Camera or Motor System	$ 809.00
Matte-Box B f/Prime and Zoom Lenses	$ 743.00

MOTOR FOR RX 4/5, SB/SBM

ESM Multispeed/Sound-Sync 12V Motor only	$ 942.00
ESM Motor, Charger, NiCad Battery, Handgrip	$ 1713.00
TXM10B USA made Crystal Motor for all H16s	$ 895.00
These Crystals are for EL/EBM/ESM	
Bolex 24/25fps Combo Crystal+Pilotone Unit	$ 914.00
TXM-16 USA made 24/25/30fps Crystal Only	$ 330.00
TXM-16V USA made 23.976/29.970 Crystal Only	$ 330.00

SOUND ACCESSORIES

Barney-Blimp 1-Piece for use w/Mag/Zm Lens	$ 695.00
Replacement Clapstick/Bloop Lamps, pair	$ 35.00
Clapstick/Bloop Adapter for EL/EBM	$ 35.00
Clpstk/Blp Adapt w/cble f/SBM/RX5 350001>..	$ 80.00

ANIMATION & TIME LAPSE

EL H16 Lapse-Timer with Remote Control	$ 2836.00
EL H16 Synchro-Flash Relay	$ 229.00
Bolex Animation/Time-Lapse 1:1 shaft AC/DC	$ 4282.00
ITSM/BXAC Animation/Time-Lapse 110V/AC	$ 990.00
Same System f/12V/DC, Battery not included	$ 1340.00
CCE Animation M4/5 S4 RX4/5 SB/SBM EBM	$ 295.00

EDITING

*Bolex 16mm Film Viewer 100w Halogen Lamp	$ 1695.00
*Bolex Cement Splicer 16mm	$ 343.00
Bolex 16mm Film Rewinds (Pair)	$ 400.00

*While quantities last, no longer offered by factory

Office Hours 8-12/1-5 Weekdays Eastern

TEL# 706-636-5210 FAX# 706-636-5211

WE SHIP ANYWHERE

Prices stated in U.S. dollars. Subject to change due to currency fluctuation.

CHAMBLESS CINE EQUIPMENT

Rt 1 Box 1595, Hwy 52 W

Ellijay, GA U.S.A. 30540

BOLEX AGENT

We Accept MC / VISA Complete Sales & Service

cess you are using."

He continues, "Almost everybody has a good idea of what the theoretical latitude of their negative is, but after printing or transferring, the practical latitude of the final product is something else. Sure, you can always adjust the controls to make sure you see details in the shadows or highlights, but if those details are way beyond your practical latitude, you'll be turning the tonal range of the image to mush."

A 24-field numbered color chart is also included. "This serves two important functions," Riviére explains. "First, the colors follow the spectrum. This is intended to show the color bias of any stock, lab, or video system. If you see that fields 15 through 19 look to be about the same color, you know that something is wrong and you're losing subtleties in that part of the spectrum. If your art direction calls for a lot of purple, pink, and lavender, you might need to switch stocks or track down the problem. Second, by numbering the fields, the cinematographer and the telecine or lab timer-colorist can talk on the phone about specific colors. It's a pretty simple idea, but we have about 30 color charts and none of them are numbered in a practical way like this."

As Neyman and Riviére continued testing variations of charts and discussing the results, they realized that what was needed was more than an improved gray scale/color chart. The requirements of the lab timer-colorist were different than those of the telecine colorist, so a chart designed for one would have information that was meaningless to the other. Also, if there was a problem with the film stock, camera, light meter, lab, or the way it was shot, the chart shot on location would be compromised and everything would be off.

This led the duo to create different specific setup charts for the telecine colorist and the lab timer-colorist and put them on perfectly shot film strips of every stock. That way the equipment could be set up according to the same stock the cinematographer was shooting on location. "We felt that this really completed the Thorough Control System," notes Neyman. "The setup film strips are shot and checked at a lab under perfect conditions. When the telecine colorist calibrates the equipment using the film strip, not only is the process much more accurate, there is a basis of comparison to the chart shot on location. It's this comparison which enables the cinematographer to know immediately if something is going wrong. And by comparing the gray scale on the strip to the chart shot on location, the colorist can record an exact, quantifiable exposure report."

The completed Thorough Control System consists of the Gamma=1c chart, which includes the IRE gray scale, the Exposure Latitude Index, the three bands of Easily Recognizable Colors, and the numbered color fields. This location chart also includes an area for placing magnetic tabs with information for the colorist (film stock, filters, etc.). The Gamma=1t film strips contain the setup chart for the telecine equipment, and are available on every stock. The telecine setup film strips have the same elements as the location chart, but also include a 45 IRE band and a red reference band. The Gamma=1p film strips are designed for the lab timer-colorist and are also available on every stock. The lab print film strips also have the same elements as the location chart, but include a greater skin tone area as well as a large white, middle gray, and black area for measuring control densities with a densitometer.

Dan Valliere, an optical color timer at Cinema Research Center, has been helping test the Gamma=1p printer control film strips. Valliere notes, "I've taken the chart through every step we normally use for optical effects [original negative to interpositive to internegative to print positive] on about every stock combination." Having evaluated the difference between the Gamma=1p and the control methods traditionally used at film labs, he says, "The printer version of this new chart is quite helpful. It has more information than the 'girl head,' 'china girl,' or 'Ronnie,' as we call her. It's more sensitive to laboratory drifts, and the way it's designed makes it

easier to see color shifts. No one has taken a color chart this far, and I think eventually it will become widely accepted." Asked if the new laboratory control system would be difficult for lab timers to adapt to, he replies, "I don't think so. It isn't more difficult or easier; it's just a matter of getting used to it. The girl head is a quick reference, and I'll probably continue using it, but there's more information on the new chart, so in terms of quality control you're better off using it as well."

Howard Sisko, senior telecine colorist at All Post, provided feedback as the system was being developed. He offers, "I've watched the development of Yuri's chart system from the prototype to the final product, and I think it's a great tool for improving communications between cinematographers and telecine colorists. In some cases, the colorist has no real direction: at best they get some written notes or a phone call, but often the director of photography isn't there during the transfer. While this system isn't going to solve everything, when used correctly it is a big leap forward. The numbers remove a lot of the ambiguity.

"Besides making the setup process more accurate," he continues, "I like being able to quantify the exposure information. Instead of saying you're about a stop over or under, I can say you're exactly 15 IRE over or under the 45 IRE gray line on the setup chart, which would be one stop. We always send back a problem report detailing things like hairs, scratches, vignetting, boom mikes in the frame, etc. Now we can include accurate exposure information in our reports."

Before the Thorough Control System became available, Bob Byrne, ASC heard about it and decided to implement it on the NBC series *Mad About You*. Byrne notes, "I'm the kind of guy who will look at something new and try it out. If it works, fine, if not, forget about it. I'm not going to spend a lot of time contemplating the mechanics. I decided to try the chart system on a couple of shows, and it worked."

For *Mad About You*, Byrne uses Kodak 640T Primetime, a stock designed for telecine only.

BOLEX SUPER 16
THE ONLY ONE

The unique professional
spring driven camera in SUPER 16

With the famous 14.5-115 mm VARIO SWITAR
power zoom with auto/manual exposure
and ASPHERON 7.5 mm wide angle lens.

The **BOLEX SUPER 16** withstands anything and everything – anywhere: cold, heat, humidity or lack of electricity; the ordeal of an expedition under extreme conditions; or any other movie application whether in the field of research, science, training, fiction, animation, time laps, etc.

For the **BOLEX SUPER 16**, professional requirements are easily met and, in addition, its price has no equal.

Thanks to its carefully selected accessories, the **BOLEX SUPER 16** adapts itself to any type of production, including cristal-controlled applications.

Ask the manufacturer for a complete documentation on the above equipment and other spring- or electric driven Bolex cameras, as well as information on the possibility of adapting existing Bolex cameras and lenses for Super 16.

BOLEX INTERNATIONAL SA, P.O. Box, CH-1401 Yverdon, Switzerland,
Tel. (...41) 24 21 60 21, Fax (...41) 24 21 68 71

For USA: contact one of our **American full-service dealers:**

CHAMBLESS CINE EQUIPMENT. RT. 1, Box 1595, Hwy. 52 West, Ellijay, Ga 30540 USA,
Tel. (706) 636-5210, Fax (706) 636-5211

PROCAM. 22048 Sherman Way, Suite 105, Canoga Park, CA 91303 USA,
Tel. (818) 346-1292, Fax (818) 346-7712

BOLEX
of Switzerland

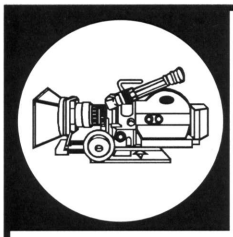
Visiting BOSTON? Pack Lightly.

ARRIFLEX 535B - POWER POD

BOSTON CAMERA RENTAL COMPANY

ARRIFLEX SR3 - ARRIFLEX 435

We carry 16mm & 35mm equipment so you don't have to. 617-277-2200 f.277-6800



THE POWER BROKER

Motion Picture Equipment For Sale

• Cameras • Lenses • Lighting
• Generators • Editing • Cranes

Call **Ken Rich** in Los Angeles

ANAMORPHIC LENSES FOR SALE OR RENT

PRIMES: 22mm F 2.5, 35mm F 2.5, 35mm T 1.7, 50mm F 2.4, 50mm T 1.7, 75mm F 2.4, 75mm T 1.7, 100mm F 3.2, 150mm F 3.5, 200mm F 4.6, 300mm F 4.6, 500mm F 5.6, **ZOOM LENSES:** 40-240mm, 40-120mm T 3.3 PL/BNCR, & **REAR ZOOM ADAPTERS.**

PHONE #: (310) 470-7569 • FAX#1: (310) 470-1150 • FAX#2: (310) 470-2877

35 MM REFLEX

The Fries model 435 is a new general purpose MOS production 35mm camera. With its optical printer compatible register pins, steadiness and 150 FPS speed. The 435 is ideally suited for special effects, commercials or any photography where a quality steady image is desired.

The 435 is a spinning mirror reflex camera with a 170 degree blanking shutter. The internal 30VDC motor runs the camera from 2 to 150 FPS forward and 2 to 50 FPS reverse, in one frame increments all crystal. The camera is equipped with take-up and supply torque motors.

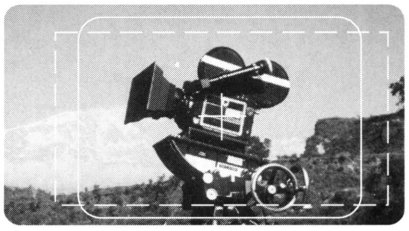
There are both 1000 ft. and 400 ft. displacement type magazines. A new feature is the light valve which allows the operator to direct all the light to the viewing system, or to the video assist, or combo which splits the light between both viewing and video assist.

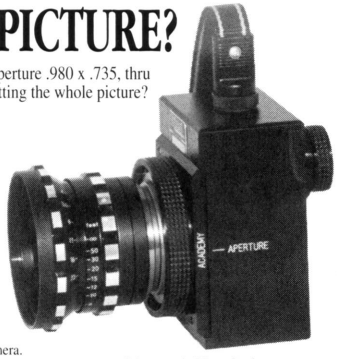
35 mm, Reflex Camera

WHY NOT SEE THE WHOLE PICTURE?

The new Fries Director's Viewfinder allows the director to view the full camera aperture .980 x .735, thru the same lenses that will be used on the camera when filming. Why aren't you getting the whole picture?

Ground Glass 1.85 & T.V. on Academy Center line shown





Film Clip: The finder has a set of register pins that will hold a film clip the same as the Fries camera.
Groundglasses: Interchangeable. The same groundglass as is used in the Fries 35R and 35R3 cameras.

Director's Viewfinder

fries Engineering

Fries Engineering designs and manufacturers special effects cameras and conversions in 35mm, 65mm and Vistavision including high speed, time lapse and motion control.

8743 Shirley Avenue, Northridge, California 91324 Phone 818-998-5400 FAX 818-998-7553

He explains, "I chose Primetime after doing some tests. Not only is it fast enough to get a good stop without melting the talent, I found it great for handling the red you always get from tungsten lights that aren't quite 3200°. And on a television series you like to be able to dim the lights a little, which makes them even more red. Primetime is a little different than what telecine colorists are used to, but the system makes the setup accurate, and I'm happy with the results."

Robert Primes, ASC used the chart while shooting the seaside-set telefilm *Malibu Shores*. He explains, "We always charted the first shot of the day and got reasonable, neutral-color, well-timed dailies that were a little flat, which is proper to allow room for tape-to-tape creativity later on. When we switched to an LLD and charted it, it came out as a perfect match to the stuff we shot with an 85 filter. When we didn't chart it, it didn't match — speaking well for the efficacy of the chart. Yuri's reasoning behind it is logical, and so far it seems to work."

Asked if he thinks the Thorough Control System will increase the trend toward video dailies, Neyman answers, "Print dailies are better, and part of the system is aimed at learning more from print dailies. When you screen print dailies you see more, you learn more, and you have more confidence about what you're doing. But video dailies are fast, cheaper, and can be watched anywhere. If you left it up to cinematographers there would only be print dailies, but that decision is usually made by other people. Fortunately, I believe we've come up with a way for cinematographers to use video dailies effectively, and to regain control over their images."

[Ed. note: The ideas in this article represent the views of Mr. Neyman, and are not meant to imply the organizational endorsement of the American Society of Cinematographers.]

Olympic Giants

Creating realistic mixed-scale images for 1996 Games promos: Part 2 of 2.

by Mary Hardesty

As detailed in our last issue, Means Street Productions director Steve Colby asked cinematographer John V. Fante to create larger-than-life visuals for a Panasonic spot featuring Olympic runners leaping over buildings and landmarks as they raced through Atlanta, Georgia. The finished 60-second spot, "Big Game," contains 43 shots, of which 22 are composites of up to 10 layers. Fante, a veteran cinematographer of mixed-scale imagery, shot this complex blend of effects and live action with the intention of giving the "giant" athletes credible scale and weight.

According to Fante, one of the keys to creating realistic scale is ensuring that your camera is the proper height from the ground. "Even an infinitesimal amount makes a difference," he notes. "I've done a lot of visual effects, starting with *The Right Stuff*, and the easiest way to make people look big or miniatures look real is to put the camera low and look up. We did that on just about every shot to add more drama to this spot."

Not only did the six-day shoot require meticulous planning of scenes and blocking for the live-action exteriors, but all the Olympic banners and signs covering Atlanta had to be created, as the city had not yet been decorated. "We did the dozen banner shots outside in a parking lot in about two hours, and used monofilament and natural wind to flip the banners in a way that made it look as if a runner had just passed by," explains Fante, who utilized 10 and 14mm lenses to increase the scale in the shot.

Fante also snuck a Super 8 camera into a baseball game to get crowd scene shots. He explains, "We were going to drop these into the background of the stadium scene, but it didn't look good, so we just ended up using random video noise to create the crowded stadium look." All these details added to the believability of the spot, but Fante claims the real key is consistent lighting.

"The critical thing is matching lighting positions and ratios," insists the cinematographer, who put shadows in the key light to simulate building shadows on the runners. "In most cases there was a three-stop difference between key and fill. On *Honey I Shrunk the Kids* we used HMIs and had to fall into a certain window, so we had to shoot at 40 to 60 fps, but on this shoot we used 20K incandescents so we could shoot at faster speeds. They're very expensive, but if you have to light a big area and shoot high-speed like we did, you save a lot of time and thus money by not having to put up a lot of smaller, cheaper lighting units."

Another important step in creating mixed-scale photographic images is to keep accurate data on each shot. "Our stage camera was tied to a record/playback video switcher, which allowed playback of rough composites of foreground and background elements running at different speeds. This allowed us to verify the timing of the athletes' actions and their framing shot-by-shot," points out Fante, who believes the decision to go with authentic athletes over actors proved to be a wise one. "They didn't hold back, even if they were just jumping over a box. Also, they were able to hit their marks time after time so we could get the footfalls to hit the background plates exactly where we wanted them. We overcranked and shot at 75 frames-per-second to make it look more realistic and to help give the illusion of weight hitting the ground surfaces."

THE NEW EUROPEAN FILM WORKSHOPS
in
TUSCANY, ITALY
May & June 1996
Cinematography • Directing
Screenwriting • Producing
Film Acting • Editing
16 & 35mm Camera Work
Video Production
Write, call or fax us for a course catalogue.
Internet: http://www.MEWorkshops.com
For 24 years, the world's leading workshop center in film & photography.
The International Film & Television WORKSHOPS
2 Central St · PO Box 200
Rockport, ME 04856
Phone: 207-236-8581 · Fax: 207-236-2558

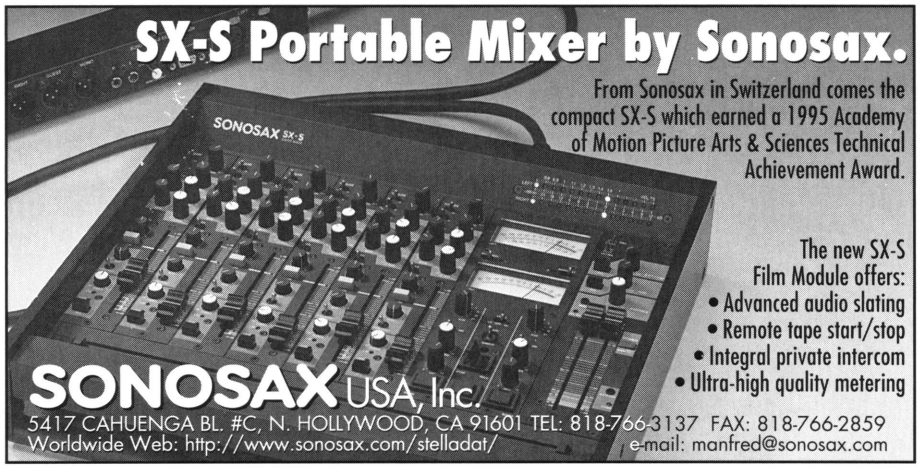
100 SUMMER WORKSHOPS & MASTER CLASSES
in
ROCKPORT, MAINE
16 & 35mm Camera
Cinematography • Steadicam
Lighting • Video Technology
Screenwriting • Directing
Avid Editing • Producing
Interactive Multimedia
Film Acting
New
Master of Fine Arts Degree Program
Write, call or fax us for a course catalogue.
Internet: http://www.MEWorkshops.com
For 24 years, the world's leading workshop center in film & photography.
The International Film & Television WORKSHOPS
2 Central St · PO Box 200
Rockport, ME 04856
Phone: 207-236-8581 · Fax: 207-236-2558

Cooke factory service

Warranty and non-warranty; factory parts in stock. Typical turnaround: 1 or 2 days. We're as close to you as Fedex overnight. We're the only factory-authorized service facility in the country. We're also famous for fixing lens repairs done elsewhere.

Cooke ZGC INCORPORATED

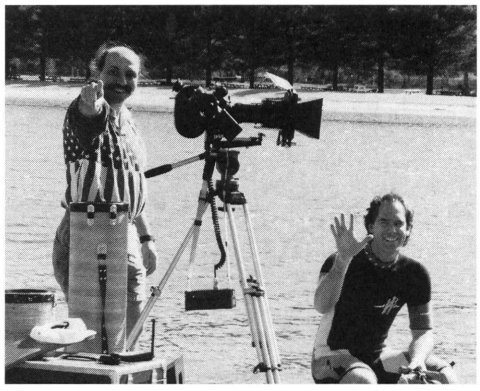
264 Morris Ave, Mountain Lakes, NJ 07046. Phone: (201) 335-4460. Fax: (201) 335-4560


SX-S Portable Mixer by Sonosax.
From Sonosax in Switzerland comes the compact SX-S which earned a 1995 Academy of Motion Picture Arts & Sciences Technical Achievement Award.
The new SX-S Film Module offers:
• Advanced audio slating
• Remote tape start/stop
• Integral private intercom
• Ultra-high quality metering
SONOSAX USA, Inc.
5417 CAHUENGA BL. #C, N. HOLLYWOOD, CA 91601 TEL: 818-766-3137 FAX: 818-766-2859
Worldwide Web: http://www.sonosax.com/stelladat/
e-mail: manfred@sonosax.com

the pocket pal™ . . .

IKON

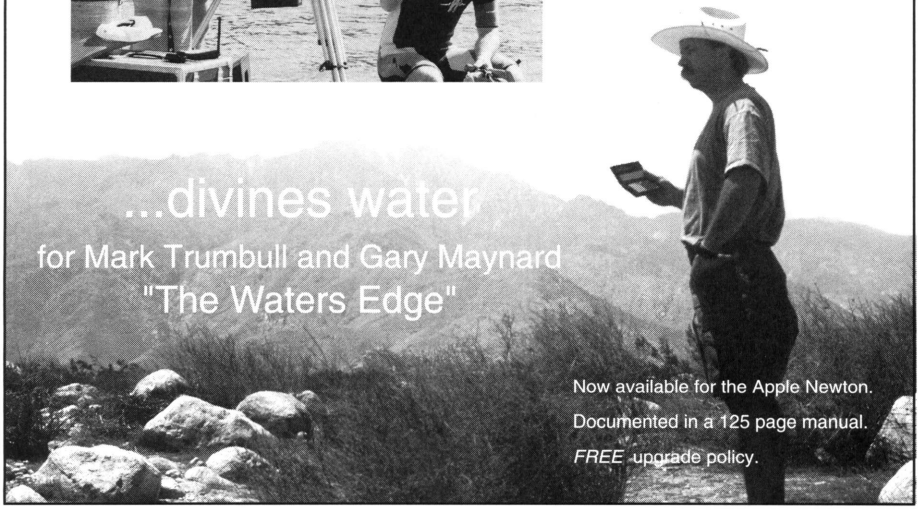
an IKONOGRAPHICS publication
HOLLYWOOD, CALIFORNIA



Unique computer software designed to assist every professional cinematographer.

Twenty routines cover framing, depth of field, format, exposure, timecode, diopter and SOLAR PREDICTIONS.

(818) 761-6644


...divines water,
for Mark Trumbull and Gary Maynard
"The Waters Edge"
Now available for the Apple Newton.
Documented in a 125 page manual.
FREE upgrade policy.

Matte lines have become a non-issue with the emergence of digital compositing techniques, but "the problem with feet hitting the ground is to keep them from looking as if the person is floating or going through the ground," observes Fante. "There are a lot of tricks to get around this imaging problem, such as using overscale props to hide feet landing, but we felt it was necessary to show the feet if we were going to make it look real. For the shot of the runners jumping over trees and racing past a girl on a bicycle, the effects guys actually created a roto matte to make it appear as if the runner's feet were sinking into the grass near her."

For one of Fante's favorite scenes, which shows the reflection of a runner in a building, the digital effects team took footage Fante had shot of the upper part of the runner and manipulated that image so it appeared to be reflected in the different windows of the building.

"It's really important from a cinematographer's standpoint to have a facility like DESIGNefx that jumps in with both feet and does everything to make the project the best they can. At one point they had three Flame artists working around the clock to meet our deadline," adds Fante, who stayed an extra week to supervise the transfer and editing. "Even if you're not paid for it, it would be foolish to allow anyone else to supervise your transfer."

Before tackling a tough mixed-concept shoot like "Big Game," Fante advises cinematographers to watch for a director who is receptive to their ideas. "The director is the leader, but the director of photography is the guy who physically has to get the job done," he says. "With such a complex shoot, it's necessary for the art director, the special effects producer, the director and the cinematographer to all be on the same page, or it won't come out right."

Credits
Client: Panasonic
Agency: Dentsu/Tokyo
Spot name: "Big Game"
Cinematographer: John V. Fante
Directors: Jeff Doud, DESIGNefx (visual effects); Steve Colby, Means Street (live action)
Airdate: Now through 1996 Olympics

compiled by Marji Rhea

Lighting Guide

Focal Press' *Lighting by Design*, by Brian Fitt and Joe Thornley, is a technical guide to the basic theory and practice of lighting. The book covers equipment, design requirements, writing specifications, awarding contracts and purchasing equipment. Emphasis has been placed on safety implications to give readers a clearer picture of current legislation.

Color filter comparison tables are included, comparing 1000 color filters from all the leading manufacturers. Appendices cover term definitions, world television systems and main voltages, lamp tables and cross references, comparison of luminaire performance, measurements, formulae and conversion factors, and CIE luminaire symbols.

Focal Press, (800) 366-2665, FAX (800) 446-6520.

Film Cleaning Machine

Lipsner-Smith's Excel 900 nonimmersion motion picture film cleaning machine uses particle transfer rollers and wetted rotary buffers to remove contaminants from the film's surface. The film passes through two softnap buffers that are wetted with a choice of environmentally responsible solvents, including low-cost isopropanol (IPA). Film is thoroughly dried and polished to complete the cleaning cycle.

The Excel 900 features ergonomic design with straight line threading. Cleaning mechanisms electronically engage at the operator's command. Cleaning speed, buffer wetness and film tension are microprocessor controlled. The compact, free-standing unit requires less than six feet of floor space.

Lipsner-Smith Company, 4700 Chase, Lincolnwood, IL 60646-1689, ((800) 323-7520, FAX (708) 677-1311.

Flicker Generator

The Great American Market's X3 Flickermaster offers a variety of flickers, chases, strobes and pulses, from realistic fire to surrealistic lighting effects. The unit will handle up to 6000 watts on three individual 2000-watt channels, each with independent controls. Each of the three independent channels has a dedicated on/off switch, built-in dimmer and variable speed control. The X3 also has a special memory mode that allows up to six flicker/strobe effects to be stored for quick recall.

The Flickermaster is available in 120V or 220V versions and has a single-feed input and three pigtail outputs. It can be used only with incandescent lamps.

The Great American Market, 826 North Cole Avenue, Hollywood, CA 90038, (213) 461-0200, FAX (213) 461-4308.

Sport Dolly Base

Chapman/Leonard's Sport ATB is equipped with a remote actuator to control the arm independently from the camera platform or crane operator seat, a 48" circular platform that allows the camera operator to rotate a full 360 degrees, and a conveniently placed monitor. The unit offers impressive speed and is electrically powered for smooth, silent operation, with a vertical boom up to 14 feet. The Sport ATB is equally effective with hand-or foot-operated turrets and uses a built-in charging system.

Chapman/Leonard, 12950 Raymer St., North Hollywood, CA 91605, (818) 764-6726, FAX (818) 764-2728.

Laser Pointer

Cinematography Electronics' Syncromark Laser System produces a visible laser spot which is synchronized to the shutter of a motion picture camera. The bright laser spot will not appear on film, but can be seen by the entire crew and in the camera eyepiece while the camera is running. This makes it ideal for marking an actor's position, a focus point, or a reference point for camera position, without the visual restrictions of grip tape. Two or more Syncromark Laser beams can be crossed to mark the position of a handheld object. A useful tool when focus is critical and depth of field is minimal, the Laser System is compatible with all major motion picture cameras, including Panavision, Arriflex, Moviecam and Aaton.

Cinematography Electronics, 31238 Via Colinas, Suite A, Westlake Village, CA 91362, (818) 706-3334, FAX (818) 706-3335.

Desktop Digital Video Editing Software

Star Media Systems' Video Action Pro 2.0 and Video Action NT desktop digital video editing software packages integrate transitions, video special effects, video titling, animation, keying, morphing/warping, and sound. The package offers a set of powerful editing tools, instant cuts-only previews, additional 3-D effects, filters, new titling capabilities, and natural-looking and customizable video effects such as variable angle/radius/transparency page effects. Numerous file formats, full 50/60 fields per second, image sequence input/output, and a variety of video compression techniques are provided. Video Action Pro 2.0 is compatible with a wide range of popular video capture and playback boards such as the DPS Perception, Targa 2000, Fast FPS60 or any other video-for-Windows compatible board.

Star Media Systems, 1163 E. Ogden Ave., Suite 705-364, Naperville, IL 60563, (708) 305-9432, FAX (708) 355-4843.

S-VHS Camcorder

JVC's CY-X3 3-CCD S-VHS camcorder is priced to fill a niche just above single-CCD camcorders but significantly below existing professional 3-CCD models. The unit's three ⅓" CCDs provide a sensitivity of F8 at 2,000 lux, and even in light as low as 4 lux produces bright pictures with good resolution and strong, vivid colors. The X3 is equipped with many advanced features found in more

expensive cameras, such as Full Auto Shooting (FAS), servo zoom lens and full-sized S-VHS recorder with time code. Many of these features can be adjusted manually as well. The FAS adjusts instantly to changes in shooting conditions, from bright outdoor lighting to indoor lighting. As conditions change, the FAS automatically adjusts gain, iris, audio level and color balance. An extended electronic iris is built-in to maintain a constant video level in very bright lighting conditions, without inserting an ND filter. The 14:1 servo zoom lens has a manual override, and the amount of pressure applied to the rocker determines the speed of the zoom for a more natural transition.

The X3 produces superior sound quality via a mounted microphone and separate inputs for two Hi-fi audio tracks. For more stable recording, the X3 uses a full-size head drum, similar to those in studio decks. With the addition of a built-in CTL Time Code generator, JVC has further integrated the X3 with its Edit-Desk S-VHS editing system. CTL Time Code, designed for S-VHS, assures fast and accurate editing and offers the benefits of VITC Time Code without the drawbacks. A new "scene finder" function records an identification code each time the trigger is pressed, allowing the editor to easily locate the next or previous scene.

The X3 also includes a built-in time/date generator, a large, high-resolution 1.5" viewfinder, variable scan for shooting CRTs and quick-release tripod adapter plate.

JVC Professional Products, 41 Slater Drive, Elmwood Park, NJ 07407, (201) 794-3900, FAX (201) 523-2077.

Sync Cables for Strobe Light

Two new sync cables from Unilux enable commercial and motion picture makers to use the advanced Unilux H3000 strobe light with the new Arriflex 535 and SR3 cameras. New cables are also available for the Moviecam Compact and Aaton XTR production cameras.

The H3000 can fire from five to as many as 650 flashes per second, each with a duration of only $1/100{,}000$ of a second. The system's control console has an automatic sync recognition system that determines which type of camera is being used by reading the camera-generated shutter pulse. The incoming signal triggers the strobe, ensuring the correct number of flashes in the proper synchronization with the camera. The H3000 light head can be focused and uses precision Fresnel lenses to enhance its spot-to-flood ratio.

Unilux, 290 Lodi Street, Hackensack, NJ 07601, (800) 635-2743, FAX (201) 489-3943.

Photographer's Platforms

Car Top Tent's Deluxe and Demi Photographer's Platforms are capable of supporting up to 450 pounds when the vehicle is parked, attach to an aftermarket roof rack in minutes, are reached with a telescoping ladder, and can double as luggage racks.

The Deluxe Photographer's Platform measures 8' x 5 ½' and provides 44 square feet of elevated workspace. The telescoping aluminum ladder acts as both an opening lever and a supporting member. (Vehicles taller than 6' will require a ladder extension.) The Demi Photographer's Platform weighs only 30 pounds and measures 4' x 5 ½', providing 22 square feet of elevated workspace.

Car Top Tent, (800) 227-8671.

3CCD Point-of-View Camera

Toshiba's Model IK-TU40A broadcast-quality digital POV camera, designed for remote broadcast use, has a remote head the size of an ice cube, allowing it to be mounted anywhere. The camera utilizes ten-bit DSP architecture developed by Toshiba, combined with three 410,000-pixel CCDs. The result is 750 horizontal lines of resolution and a 62dB signal-to-noise ratio.

Equipped with RS-232C interface and incorporating easy-to-read onscreen menus, the camera can be centrally controlled by way of a personal computer. This provides the user with fingertip access to a wide range of functions and advanced image processing modes. The camera accepts C-mount lenses and has video outputs for NTSC, S-VHS and RGB. A 10' detachable cable is included with the camera package.

Toshiba Imaging & Information Systems, 1010 Johnson Drive, Buffalo Grove, IL 60089-6900, (800) 344-8446, FAX (708) 541-1927.

CD-ROM Stock Footage Catalog

The Image Bank's latest CD-ROM catalog offers photography, illustration, and film clips all on one disc, and can run either on a Macintosh system or through Windows. Nearly 10,000 images are accessible by category, artist, key words, concept, or color. Each image is discreetly watermarked, allowing clients to use images in presentations. Selected images can be manipulated with any of the graphic arts software programs, cropped and dropped into layouts. Once selected, reproduction-quality images can be obtained directly through a local Image Bank office.

Like a traditional demo reel, the footage section of the CD is representative of the Image Bank's broad range of subjects and also includes two complete sample reels (one with contemporary footage, the other archival), five television commercials from around the world, two corporate videos, and a variety of film clips.

The Image Bank, (800) 842-4624, (212) 529-4008, FAX (212) 529-8889.

Digital Video System for QuickTime

Multimedia Group's Media 100 qx broadcast-quality PCI-based digital video system for the QuickTime digital video market features the same single-board digital video engine and video and audio quality found in Media 100, coupled with Adobe Premier 4.2. Media 100 qx employs Apple Computer's PCI-based Power Macintosh to deliver true video-processing capabilities required for broadcast applications, handling video signals in native YUV color space. Media qx media files can be dragged and dropped into any QuickTime application and manipulated immediately. Additionally, any QuickTime file can be dragged and dropped and used seamlessly with Media 100 qx.

The Vincent digital video engine used in Media 100 qx is a dedicated PCI-bus video card for processing video in YUV color space, which broadcasters use in displaying video on NTSC or PAL video monitors. Other competitors use graphic display cards that process signals in RGB color space, which must be converted to YUV color space to view programs on NTSC or PAL monitors.

Transition effects such as dissolves, wipes, pushes and slides created in Adobe Premiere are accelerated with Media qx; most will be processed at approximately eight times real time. The system is fully compatible with existing Macintosh environments and all QuickTime applications, such as Macromedia Director, Specular Infini-D, and Adobe's Photoshop and After Effects. Media 100 qx also integrates with Media 100 and Grass Valley Group's VideoDesktop.

Data Translation Multimedia Group, 100 Locke Drive, Marlboro, MA 01752-1192, (508) 460-1600, FAX (508) 481-8627.

APS Accessories for ENG Cameras

Armato's Pro Video is offering a camera support system and two adapter cables for professional ENG cameras. The Steady Stick Pro, designed to eliminate shoulder fatigue, attaches to the bottom of most ENG cameras and camcorders of up to 30 pounds and securely braces itself to the cameraperson's belt for solid support. The Steady Stick allows the camera to be raised two feet above a crowd.

The Model #6PBNC Adapter Cable allows the user to see all of the viewfinder information on the color monitor, while Model #6PXLRF is a 6-pin to XLR cable for direct audio input into a JVC camera head. An internal modification is available for the audio input of the Panasonic AG-456 industrial camcorder.

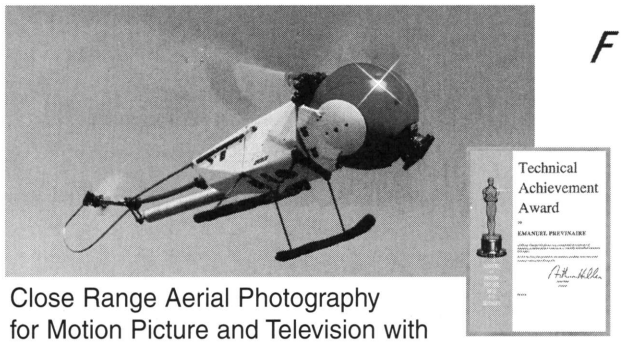
Armato's Pro Video, 67-16 Myrtle Ave., Glendale, NY 11385, (800) 628-6801.

Sound Synchronizer

Ambient Recording's Lockit Synchronizer is a self-contained timecode and videosync generator that provides 30 fps timecode locked to 30 fps video at extreme accuracy. The unit is Aaton-compatible and has less than one frame a day drift when running with other Clockit units and film cameras. The unit can also be tuned to calibrate the Xtal at regular intervals. The videosync oscillator is Xtal-driven for low jitter and stable output.

For information: Ambient Recording, Konradinstrasse 3, D-81543 Munchen, Germany, 49 89/6 51 85 35, FAX 49 89/6 51 85 58.

ACADEMY AWARD® WINNER



FLYING CAM® MOVING-CAM s.a.

Close Range Aerial Photography
for Motion Picture and Television with
Remote Controlled Miniature Helicopter.

ACADEMY AWARDS® and "OSCAR" Statue are registered trademarks of ©A.M.P.A.S.®

• U.S.A. Los Angeles
Ph. 310 581 9276
FAX 310 581 9278

• EUROPE Belgium
Ph. 32 41 273 103
FAX 32 41 271 565

Table-top Technology
Probe II
Tubular Lens System
• 35mm T5.6, Super 16 & 16mm T2.8.
• High resolution glass, flat field.
• Interchangeable prime lenses.
• Manufactured by Century Precision exclusively for Innovision Optics.
PANAFLEX
InnoVision OPTICS, INC.
Sales & Rental: Santa Monica, California Phone:310-394-5510 • Fax:310-395-2941

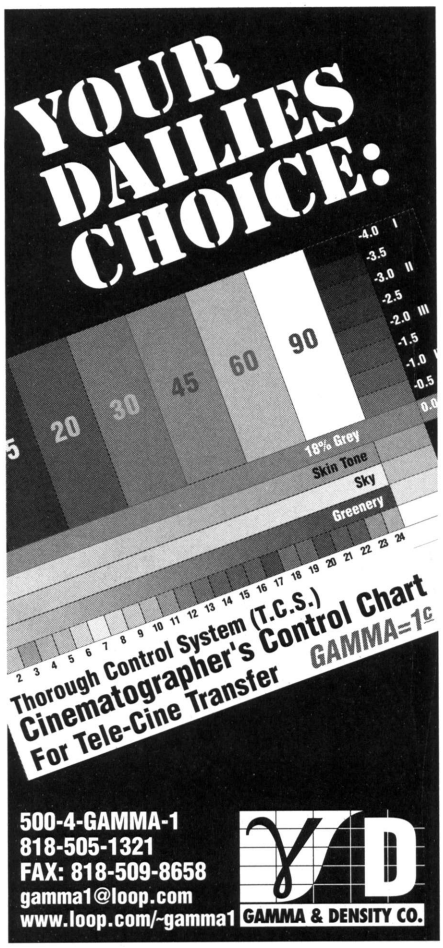
REDESIGNED

PORTA-BRACE CAMERA CASE
CARRY-ON-*TWO*

■ A NEW generation of camera cases from Porta-Brace® is designed with a new interior pillowing system for cushioning the camera. Look for new pockets inside and out for batteries, tapes, ear phones, white balance card, tripod plate, setup cards and more.

This compact design has all the time honored features of the traditional Carry-on traveling case, but now it has radical changes which make the case a thrill to behold and a pleasure to carry.

porta brace
K & H Products, Ltd.
Box 246
North Bennington
Vermont 05257, USA
PHONE 802-442-8171
FAX 802-442-9118



RECHARGEABLE POWER MANAGEMENT

from the Creators of Powerful Reliable Rechargeable Nickel Cadmium Battery Systems Batteries & Chargers

Powerflex

totally unique & fully flexible Battery Belts

Powerlight

12 - 24 - 30 Volt 5 or 7 Ah Lighting Batteries for MSR - HMI & Tungsten

Powerstation

true microprocessor controlled fast chargers

Power-Source

12 +12 Volt or 24 - 30 Volt, 100 - 300 Watt Universal Mains Power Supplies

HOLLYWOOD POWERHOUSE

12 + 12 or 24 - 30 Volt 5 & 7Ah Camera Batteries

POWERBANK

12 - 24 - 30 Volt Multiple Battery Systems up to 48 Ah for MSR - HMI & Tungsten Lights

CINE POWER INTERNATIONAL LTD
MAGNOLIA LAKE - MAMHEAD
EXETER - DEVON - EX6 8HG
UNITED KINGDOM

Tel: +44 (0)1626 888433 - Fax: +44 (0)1626 888435

Contact us for details of your nearest Stockist

New York's Shooting Gallery: Aiming for Artistic Freedom

by Brooke Comer

Larry Meistrich was a struggling production assistant in 1990 when he envisioned an independent production company organized around a cost-effective structure that would nurture new talent without compromising artistic freedom. With that ideal, he and another aspiring producer, Bob Gosse, founded the Shooting Gallery. Today, Meistrich's brainstorm is the leading independent production company on the East Coast, producing such features as Nick Gomez's *New Jersey Drive* and offering production services to studio films, TV movies, commercials and music videos. Meanwhile, Shooting Gallery Records, an in-house record label, develops soundtracks for films and serves as a music supervision and publishing company; in addition, a non-profit arm, the Shooting Gallery Foundation for the Arts and Humanities, raises money for selected charities.

"I never had the desire to go to Hollywood," says Meistrich. "My family is here. My friends are here. Los Angeles is too much of a company town." During the early Nineties, when the film industry in New York was waning, Meistrich and his fellow filmmakers recognized the local talent and decided that if nothing much was happening, they'd make it happen. The former sweat shop in TriBeCa that became their headquarters "wasn't much to look at," Meistrich admits. "Basically, a rich landlord wanted to hang out with film people, so he let us have 5,000 square feet for $400 a month and we fixed it up ourselves. It cost a few grand."

The Shooting Gallery's first shows were mostly short films or independent productions that held readings and casting sessions there and later shot in the same space. "We had no overhead, so we worked on a barter system at first," Meistrich explains. "Our first customer brought sheet rock and wood and built an office. The next guy brought tables and chairs. We started paying bills, and we kept growing."

Meistrich, Gosse and their friends had also worked as grips and production assistants on enough New York-shot films to be able to call in a few favors. "We knew which grip house would give us a break. Or we knew a grip with a van to save a hundred dollars. Whatever we saved became our fee, and we'd use whatever expendables were left over — props or materials — to shave off the cost of the next person down the line."

Nick Gomez's first film, *Laws of Gravity*, was their first success. "Then Hollywood's doors opened to us," Meistrich recalls. "But we didn't want to go through them. We were the flavor of the month."

Success to the Shooting Gallery's owners meant taking over the entire building where they had been renting space. "We sold stock privately, to people who weren't in the film industry," Meistrich explains, "and we've been successful in paying them back."

And now that the company is grossing 30 million dollars annually and looking better every year, investors are satisfied to see their money grow. According to Meistrich, "They're not telling us who the lead actor should be and what color shirt he should wear. We don't have the pressure to hit a home run every time. So we can give our filmmakers casting approval, final cut and music approval. It's a scenario where the art people and money people are working together instead of battling each other every day. All the creative controls are tied to staying on budget. We find that these men and women make better films if you leave them alone."

The Shooting Gallery doesn't own any camera equipment yet, but does have its own postproduction facility for picture and sound. "We have a lot of things to keep costs down,"

says Meistrich. "And we have a philosophical way of dealing with the business end of filmmaking. We never take a fee. We believe in the filmmaker enough to put the money on the screen and feel that the back end is worth something."

The Shooting Gallery's production service company, Guns for Hire, acts as an alternative line producer. "Instead of hiring a line producer," says Meistrich, "you can hire this film company. We've shot over 2 ½ million feet of film this year and we're an important customer to Kodak, General Camera and the unions. We can have overall deals that are closer to what the studios get."

He adds that there are no real criteria for the kinds of projects that come in. "We don't do porn films or Nazi propaganda films," he notes, "but we're there for the studio-level people down to the no-budget people." About 30% of these projects are studio features and 70% are independent films, mostly in the $500,000 to $3,000, 000 budget range.

The Shooting Gallery's Foundation for the Arts and Humanities was initiated as a way to help the filmmaking community's image and use its power to raise money to help various charities and urban children. "On each film," says Meistrich, "we'll do a specific event that the filmmaker picks." On *New Jersey Drive*, the Teamster captain's mother died of lupus, so the Foundation held a ballgame against the teamsters, featuring celebrities ranging from Tim Robbins to Walter Matthau. "Lupus was our charity and the Helen Keller Foundation was theirs," says Meistrich. "We wanted to give back to the people who'd been good to us."

The Foundation also raises money for an endowment called Believe in Me, which sends financially-challenged children to college. "We want to use the media to raise money," Meistrich says. "We're doing an album with PolyGram, and based on the record sales, more money will go into the endowment fund." The program also finds ways to give children an opportunity in the arts. "We're setting up programs in urban schools, and bringing children in to learn the filmmaking process. We're like a micro-brewery. We're doing everything the studios are doing but we're doing it on a smaller level. But we're doing it just as efficiently and just as well."

MOVIECAM COMPACT

BOSTON

THE CAMERA DEPARTMENT

BOSTON FILM FACTORY 278 BABCOCK STREET BOSTON MA 02215

PHONE 617 562-0320 FAX 617 562-0324

The Ultimate Mitchell Drive

All Speed Crystal Motor for GC's, Standards, Mark II's & Fries 35R

- Every Film, Video & HMI speed from 0.000 to 128.00 FPS
- Settable & Accurate to 1/1000 FPS
- Intelligent, programmable readout
- Exclusive, non-slip motion control interface

Lynx Robotics - C-50M Camera Drive

Lynx Robotics, 6924 Canby #116, Reseda, CA 91355, 818.609.9620 fax 818.609.8153

KINO FLO® FLUORESCENT SYSTEMS FOR FILM AND VIDEO

Technical Achievement Award

FRIEDER HOCHHEIM, GARY SWINK, DR. JOE ZHOU and DON NORTHROP

The 1994 Technical Achievement Award For The Kino Flo Lighting System

©A.M.P.A.S.®

PATENTED CONNECTOR

■ HIGH OUTPUT ■ COLOR CORRECT

■ FLICKER FREE ■ LIGHTWEIGHT

LOS ANGELES: 10848 Cantara St., Sun Valley, CA 91352 U.S.A.
Tel: (818) 767-6528, Fax: (818) 767-7517
LONDON: Cirro Lite (Europe) Ltd.
Tel: (081) 964-1232, Fax: (081) 964-3134
MUNICH: Dedo Weigert Film
Tel: (089) 35-616-01, Fax: (089) 35-660-86

KINO FLO® incorporated

PreOwned Packages.

16mm/35mm Cameras & accessories

The equipment we offer for resale is in the best possible condition. We back it up with a 30-day limited warranty, based on your inspection at time of purchase and on normal use. Call or fax for a complete listing.

Isaia
AND COMPANY

4650 LANKERSHIM BOULEVARD
N. HOLLYWOOD CA 91602 USA
818-752-3104 800-5-CAMERA
FAX 818-752-3105

• Coming soon...

ARRI 435

Sales and Rental
CINEQUIPT INC.
Video & Film Equipment

856 Raymond Avenue

St.Paul, MN 55114

612/ 646-1780

Books in Review

by George Turner

Dark Carnival
by David J. Skal and Elias Savada
Anchor/Doubleday, 360 pps, hardback, $40

It's hard to imagine a more appropriate title for a book about "the secret world of Tod Browning, Hollywood's master of the macabre." Browning is a tough subject to tackle because he was somewhat of a mystery man who gave out very few interviews during his working years, and no retrospective after his retirement from films. He was a true pioneer of the film industry. After several years as a carnival spieler and burlesque comedian, he began his film career in 1913 with D.W. Griffith at Biograph as an actor and assistant director. Browning concentrated on comedy in his earlier films, but when he became a writer-director he showed a leaning toward crime melodramas.

On a foggy night in 1915, while Browning was driving his friends home after a roadhouse drinking party, his car collided with a freight train. Griffith actor Elmer Booth was killed and Browning was seriously injured. Thereafter his films veered increasingly into strange, macabre drama. Is this a coincidence? The authors suspect it isn't.

During the 1920s, when American-made weird films were scarce, Browning was called "the Edgar Allan Poe of the screen." He teamed with the great character actor Lon Chaney for several pictures that exploited Chaney's ability to portray twisted, maimed characters. These include *Outside the Law, The Unholy Three, The Black Bird, The Road to Mandalay, West of Zanzibar* and *Where East is East.* Some of his early talking pictures, such as *Dracula* and *The Iron Man,* added to his fame, but his remarkable 1932 film *Freaks* created such a furor that his career was essentially ended. He made four more pictures over the next seven years, none of which restored his reputation. The allusion to Poe fits Browning's private life as well, for the quality of his life, like that of his work, was determined largely by the ups and downs of his battle with alcohol.

Tod Browning remains an enigma, but *Dark Carnival* casts more light on him than all previous writings about him combined. The authors conducted formidable research and taped many interviews to give us this wealth of material about their reclusive subject.

Faster and Furiouser
by Mark Thomas McGee
McFarland, 350 pps., library binding, $40

Many lovers of old movies recall the films of American International Pictures through a shimmering haze of nostalgia. Most of these fans entered puberty at about the time AIP entered the field, and grew up with its teen-angled tough-girl pictures, beach parties, horror pictures, hot-rod fests, war yarns and imported Italian hero epics. Slightly older film addicts growl at the very mention of the company which, through *chutzpah,* exploitable titles and lurid advertising, dominated the low-budget film market for 25 years.

AIP was founded in the mid-1950s by James Nicholson and Samuel Arkoff. The major studios weren't making many horror pictures, and AIP had a bonanza filling the void with awful shows in which cheesy monsters waddled around in the sunlight like kids at a picnic. The beach-party and hot-rod pictures made little sense, but displayed plenty of pretty girls and boys living dream lives. The combat stories were made economically in neighboring hills using war surplus equipment. The teen and horror genres were combined in the famous and infamous *I Was a Teenage Werewolf* (with a youthful Michael

Landon), *I Was a Teenage Frankenstein, How to Make a Monster* and others.

The quality of the product perked up beginning in 1960, when longtime AIP producer-director Roger Corman made *House of Usher,* the first of a series of features based on stories by Edgar Allan Poe. These pictures, imaginatively photographed by Floyd Crosby, ASC and others in color and widescreen processes, built a well-deserved following. Among the actors in the Poe features were such stalwarts as Vincent Price, Boris Karloff, Peter Lorre, Basil Rathbone, Lon Chaney Jr. and Ray Milland. The talent both behind and before the cameras became increasingly impressive until, in 1978, AIP merged with and was soon absorbed by Filmways.

In vastly revising and enlarging his 1984 version of *Fast and Furious,* Mark McGee has produced a detailed and penetrating look at AIP and most of the personnel who were deeply involved with it. It includes a wealth of amusing anecdotes, an extensive filmography and plenty of photos, adding up to a valuable history of the production company.

Pasolini Requiem
by Barth David Schwartz
Vintage, 785 pps., paper, $17.85

On the morning of November 2, 1975, the corpse of Pier Paolo Pasolini, Italian novelist, poet and filmmaker, was found in an open field in Ostia. He had been beaten and kicked repeatedly and finally was run over once or more by his own car. His assassin was a boy street hustler, one of many with whom Pasolini had consorted over the years. This event is as much the starting point as the finale of Schwartz's expansive biography, a deep look into the conflicting beliefs and ideas that fed Pasolini's creativity.

Pasolini Requiem, first published in 1992, is now available in a paperback reprint. It's a formidable piece of work that provides considerable insight into the thinking of one of Italy's most influential and controversial minds. The director's films include *The Gospel According to Matthew, Oedipus Rex, Media, The Decameron, The Thousand and One Nights* and *Salo, or the 120 Days of Sodom.* His story is interesting and disturbing.

Hiring Lens Technician

The job: maintaining and repairing our rental lenses. We'd prefer someone experienced with Angenieux and Cooke zooms; or we could train you to work on those lenses. Good pay, based on experience; profit sharing; medical benefits. This is a permanent, full-time job. We use Zeiss MTF machines, Richter collimators, a Zimmerman T stop bench and 2 Century Precision projectors (in dedicated rooms) to keep our lenses like new or better than new. We're perfectionists here, so you have to enjoy working to that high standard. Please mail your resumé to Greg Reilman.

CLAIRMONT CAMERA
4343 LANKERSHIM, NORTH HOLLYWOOD, CALIF. 91602

THE TOUGH, CUSTOMIZABLE, LOW-COST, LIGHTBANK ALTERNATIVE

Easily fitted to any lamphead with barn doors, LCD is the inexpensive alternative to "frame and fabric" cones. Designed for real working conditions, LCD's simple construction and multiple diffusion options provide "on the fly" flexibility, giving you just the right light to make any shot.

LCD LIGHT CONTROL DEVICE
For information, call 800-692-2787, or fax 818-504-6180

A Division of Backstage Equipment, Inc.
8010 Wheatland Avenue D
Sun Valley, CA 91352

A Zoom Come True.

Recognize this lens?
It's the Century/Canon Series 2000, 150-600mm lens. We've extensively re-engineered Canon's fine variable prime, turning it into a true zoom which holds focus & eliminates image movement.

Feature Attractions.
We combine Canon's optics with a new housing which enables conventional zooming and integrates with today's follow-focus units & zoom motors.
Feel precision in every move. Each piece meshes with the next. Markings are large, clear, & bright.
The new lens accepts Century's TeleFx Rear Filter Stage. Telefx's 2 enclosed stages yield 360° rotation. Filters slip in & out without frames. Grads are positioned via a spring lock.

Star Quality.
The Academy of Motion Picture Arts and Sciences selected the S-2000 150-600mm lens for a 1991 Technical Achievement Award.

Now Playing.
The Century/Canon Series 2000, 150-600mm lens is available for purchase, or as a modification to your 150-600mm lens.

To find more, call Jeff Giordano:
1-800-228-1254

Century precision optics
10713 Burbank Boulevard
No. Hollywood, CA 91601
Tel: 818-766-3715
Fax: 818-505-9865

USED MOTION PICTURE EQUIPMENT

PH(216) 647-4999
FX(216) 647-4998
Visual Pursuit Inc.
CAMERAS SUPPORT LENSES EDIT. EQUIPMENT
46994 PECK WADSWORTH RD. • WELLINGTON, OH 44090

MEDIA
LIGHTING & SUPPLY
•
EXPORTADOR
Flete Diario Desde Miami
Hablamos Español
•
Lighting and Grip Equipment
Film Cameras and Accessories
Lamps / Expendables
ENG / Tripods and Dollies
New and Reconditioned Equipment

1996 N.E. 148 Terrace • Miami, Florida 33181
(305) 949-8800 • 1(800) 345-5938
Fax: (305) 949-7600

Brooks Institute graduates are working film-makers. Worldwide.

Brooks Institute school of film-making and video teaches all aspects of production including cinematography, writing, editinganddirecting. At Brooks,every film student makes films. Our students win awards, our graduates work. B.A. Degree program starts three times a year.

Brooks Institute of Photography
Santa Barbara, California
Write or Call for information. Dept. AC
801 Alston Road,
Santa Barbara CA 93108
(805) 966-3888 X 217

Classified Ads

RATES

Ads set in light face type are **$2.50 per word.** Text set in **bold face** or all capitals (except the first word of the ad and the advertiser's name) are **$3.00 per word.** Remittance to cover cost must accompany copy. Send ad to **Classified Advertising, American Cinematographer, P.O. Box 2230, Hollywood, CA 90078.** Deadline for copy is the first week of the second month preceding the date of issue. Subject matter is limited to items and services pertaining to filmmaking and video production. Words used are subject to magazine style abbreviation. **Minimum amount per ad: $25.**

EQUIPMENT FOR SALE

NEW CRYSTAL MOTORS: For old/new **BOLEX**, 15 speed $895. For **ARRI** 16-S/M $1195. Much more! Catalog: **TCS** (206)932-7280.

ARRIFLEX S Package: 3 prime lenses, 2 400' magazines, cable, case, $2,000. VISUAL PURSUIT, INC. (216)647-4999.

ARRI SR, Zeiss zooms, prime sets, mags, Nagra 4.2 $2200 & 4L $1200 crystal, univ. preamps. (213)668-1176.

ARRIFLEX M/B Package-3 prime lenses, 2-400' magazines, variable speed motor, mattebox battery, cable, case $2,900. VISUAL PURSUIT (216)647-4999.

SMS PRODUCTIONS, INC. RENTAL/SALES/SERVICE. NEW/USED-ARRI, BOLEX, CARTONI, LTM, LOWEL, MATTHEWS, O'CONNOR, SACHTLER, STEENBECK, ETC. (312)738-0747.

16-BL ACCESSORIES: Crystal sync units with variable speed $325. Offset viewfinder $600. Prime lense blimphousing excellent condition $650. 400' magazines $250. VISUAL PURSUIT, INC. (216)647-4999.

ARRI SR 1 #60943 w/ang 10-150mm lens (2) mags (2) batteries, charger, handle digital speed control, case. rebuilt and repainted by Arri Germany, $18,500. Zeiss 10-100mm T*2 lens $8000. CP-16R camera with ang 12-120mm, (2) mags, new batteries chargers and case fully rebuilt and repainted, 90 day warranty $5,000. NPR camera with 12-120 lens, (2) mags, 24/30 FPS xtal motor, CP orientable finder, cases etc cherry package $5600. Ang 5.9mm lens $1750. IIC 200 and 400 ft mags from $600. CP orientable viewfinder like new $1750. Many other items available call Derrick WHITEHOUSE A/V (805)498-4177. Fax (805)499-7947.

PRO VIDEO & FILM EQUIPMENT GROUP, THE USED EQUIPMENT SOURCE. (214)869-0011.

ZEISS super speed set 9.5, 12, 16, 25mm. Just serviced T1.3 Bayonette mount $7,500. Zeiss 10x100 T*2 $7,500. Zeiss 8mm T2.1 new style $4,500. VISUAL PURSUIT, INC. (216)647-4999.

EQUIPMENT FOR SALE

SR 400' MAGAZINES $1,900 each;extension eyepiece $1800; SR high speed 400' magazine $3300; 16BL magazines $250;16BL 1000' magazine $300; Arri S 400' magazines $200. Mitchell 1000' magazines $300. CP16 PLC-4A magazine $375 ea. VISUAL PURSUIT, INC. (216)647-4999.

SMS PRODUCTIONS, INC. RENTAL/SALES/SERVICE. LARGE INVENTORY OF TIFFEN FILTERS. (312)738-0747.

ARRIFLEX 16-BL Camera Package: 12x120 Angenieux Zoom Lens in blimphousing, matte box, 2-400' Magazines, new crystal sync unit with 5 speeds including variable, new battery with charger, cable, case (just serviced) $5,500. Nagra 4.2 with case just serviced $3,000. Both for $8,200. VISUAL PURSUIT, INC. (216)647-4999.

SUPER 16 conversion Eclairs, NPR, ACL, Aaton, Gizmo Arri SR. OPTICAL ELECTRO HOUSE Phone-Fax (310)204-6577.

ARRIFLEX ACCESSORIES: S mattebox $350. Arri III or II-C new sytle magazines 400' $900; Arri III or II-C 200' magazines $475; Arri II-C constant speed motor $450. II-C variable speed motor $450. Animation package for S or M with motor, control and computer-Call VISUAL PURSUIT, INC. (216)647-4999.

SR2, 3 mags, CE speedcontrol, Zeiss 10-100 T2, 2 batts., 1 charger, handgrip, Arri full overhaul, $33,500. Tel (212)226-5658 Fax (212)431-1471.

SMS PRODUCTIONS, INC. RENTAL/SALES/SERVICE PROFESSIONAL MOTION PICTURE EQUIPMENT. USED EQUIPMENT OUR SPECIALTY (312)738-0747.

ARRIFLEX BL IV Package: 2-400', 1-1000' magazine extension eyepiece, video tap port cables and case serviced and ready to shoot $95,000. VISUAL PURSUIT, INC. (216)647-4999.

STABILIZATION EQUIPMENT; GLIDECAM INDUSTRIES the manufacturer of handheld and body mounted Camera Stabilizers has Demonstration Models for sale at reduced pricing. 1-800-949-2089.

ARRIFLEX IIB Camera Package: 2-400' New Style Magazines, 25x250 Angenieux zoom lens or set of primes, cable, case, mattebox and misc, just serviced from $4800. VISUAL PURSUIT, INC. (216)647-4999.

FRIES/Mitchell FC 65mm 5 perf spinning mirror reflex camera, 30VDC motor 6 to 72 FPS, Sony Video assist, two 1000ft magazines and cases $80,000. Tel. (818)998-5400 Fax (818)998-7553.

25-250MM COOKE ZOOM MARK I WITH PL MOUNT, BRACKETRY, AND CASE-$4,000. RONFORD FLUID 30 HEAD-$3,500. CEI VP II VIDEO CAMERAS-$750. O'CONNOR 100C W/QUICK RELEASE TOP $2,500. CARTONI C40 FLUID HEAD-$5,000. JURGENS VIDEO DOOR, MODEL I FOR ARRI III-$3,800. 6X6 ARRI MATTEBOX STD W/3 STAGES-$1600. 6X6 ARRI MATTEBOX 3 STAGES W/ONI SWING AWAY-$1800. OTTO NEMENZ INT'L (213)469-2774.

EQUIPMENT FOR SALE

SR2 16/S16, pl mount (Arri), 2 mags, handgrip, 2 batteries, charger, Arri full overhaul $33,000. Tel (212)226-5658 Fax (212)431-1471.

ARRIFLEX SRII Camera package: 10 x 100mm T*3 Zeiss, 2-400' magazines, 2 onboard batteries, charger righthand grip and extras just serviced $23,500. Zeiss 10X100 T*2 also available. VISUAL PURSUIT, INC. (216)647-4999.

SYNC SOUND. Pro-walkman conversions, TC-D5 StereoSync, Micro Resolvers, S8/16mm Camera Crystals, Blooper Slates. Free literature. **THE FILM GROUP**, Box 9, Wethersfield, CT. 06129-0009. 860-529-1877.

ECLAIR NPR camera package. 10x100 Zeiss zoom lens, 2-400' magazines, crystal motor with variable speed, cable, case, new battery with charger $4700. Other lenses available. VISUAL PURSUIT, INC. (216)647-4999.

STEADICAM IIIA/EFP, heavy arm, perfect condition, many extras. Valued at 37K, Make reasonable offer (908)287-3626.

LENSES, lenses and more lenses. 16mm, 35mm and Super 16mm-Best prices anywhere call for complete list including pricing. VISUAL PURSUIT, INC. (216)647-4999.

ARRIFLEX II-C Camera Packages for Sale: PL, Arri B or BNC mounts. Too many options to list. Call and we will fax or mail you the best deal around. VISUAL PURSUIT, INC. Phone (216)647-4999, Fax (216)647-4998.

ARRI 535 BODY WITH VIDEO ASSIST, CCU UNIT, TIMECODE, 2-400FT MAGAZINES, 3-1000FT MAGAZINES EXTENSION FINDER AND CASES $185,000. CALL OTTO NEMENZ (213)469-2774.

LIGHTING: Arri 1200 par HMI's, ballast, bulb, head cable, stand $2,500. LTM HMI 4K with Ballast, Cable, Stand, Barndoors $2,500; Colortran softlights, Mole 8K Quartz super soft lights. Call VISUAL PURSUIT, INC. (216)647-4999.

SR1, 2 mags, Zeiss 10-100 T3*, handgrip, speedcontrol, 2 batteries, 1 charger, sunshade, case $16,500. Tel (212)226-5658 Fax (212)431-1471.

ARRIFLEX 35MM BL I PACKAGE: 2-400' magazines prime lens blimphousing with mattebox. Recently serviced, high speed control to 100fps, righthand grip, ready to shoot, sync sound, super quiet, perfect for the low budget feature $17,000. VISUAL PURSUIT (216)647-4999.

PRO VIDEO & FILM EQUIPMENT GROUP. LARGE SHOWROOM SELECTION OF: 16SR'S, 35-BL'S, AATON, LIGHTING, CCD CAMERAS, BETACAMS, VIDEO POST. (214)869-0011.

SR1, 2 mags, ang. 12-120 or 10-150, handgrip, speedcontrol, 2 batteries, 1 charger, sunshade, case $14,500. Tel (212)226-5658 Fax (212)431-1471.

STANDARD Worral gear head, well maintained starting at $2,400. Cinema Products Worral gearhead with case, like new $4,500. Call (216)647-4999.

ARRI SR1, 2 400' mags, 10-150mm Angenieux, 1-75 fps crystal w/phase, Zeiss 8mm prime, handgrip, mattebox, case, filters. Serviced Nov. 95; Asking: $17,500; (800)659-5821.

PROSOURCE
FILM & VIDEO PRODUCTION EQUIPMENT
DEDICATED TO PERFECTION
• IKEGAMI • ANTON/BAUER
• SACHTLER • FUJINON
• ARRI LIGHT • TIFFEN
• LOWEL LIGHT • PORTA BRACE
• SENNHEISER • PELICAN
• SHURE/PSC • CHROSZIEL
800-322-7767
Sales – Service
24 Hour Tech Support

2 day week!
Arri SR • Aaton • Shipped anywhere • 1-800-676-CINE
Cine rentals

BENJAMIN
CENTODUCATI
ASSISTANT CAMERA
NATION WIDE
(800) 980 - 0232 Pager

Scratch and Dent Sale!
BTS
BTS has a broad selection of used and blemished equipment available at reduced prices.
• Studio and ENG Cameras • Digital Effects Systems • Monitors • D1, D2, D5 • Digital Production Switchers
Call a BTS Sales Representatives in your area today!
• Northeast 201-818-4050 • Southeast and Latin America 305-594-4444 • Southcentral 214-556-2400
• Northcentral and Canada 708-803-8060
• Western 818-845-0900

Q question
Where did
MICHAEL MANN, TAK FUJIMOTO, ROGER PRATT,
HOWARD ATHERTON, MARK GOLDBLATT & CURTIS CLARK
go to FILM SCHOOL...
...and which FILM SCHOOL is the oldest in the U.K.?
Which FILM SCHOOL has trained students from more than 80 countries?
Which FILM SCHOOL is in the heart of Central London?
Which FILM SCHOOL offers work on at least 6 films in two years?
Which FILM SCHOOL includes two 35mm films in the Curriculum?
Which FILM SCHOOL is a not-for-profit educational charity?
A answer
THE LONDON INTERNATIONAL FILM SCHOOL
For full details of the two-year, full-time DIPLOMA COURSE:-
CALL: +44 171 836 9642. OR FAX: +44 171 497 3718 OR Email: lifs@dial.pipex.com
OR Write to Dept. AC9, The London International Film School, 24, Shelton Street, London WC2H 9HP, U.K.
OR LOG ON TO OUR WEB PAGES AT: http://www.tecc.co.uk/lifs/index.html
where you can find complete details of the Syllabus, Fees, Application and Enrolment. There is a convenient form for requesting a Prospectus Pack as well as News Items, details of Graduates' Work and an Ex-students' Contact Group. Alumni please Log On.

TRANSIT CASES

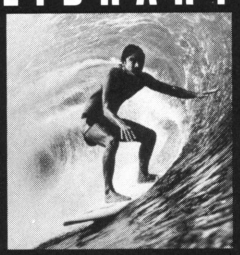
- HEAVY DUTY ATA CASES
- LOW COST SHIPPING CRATES
- LIGHTWEIGHT POLYETHYLENE CASES
- LOWEST PRICES
- QUICK DELIVERY

HYBRID CASES & ACCESSORIES

CALL FOR QUOTE: 800-645-1707

In N.Y. 516-563-1181 • Fax: 516-563-1390

THE PRETTIEST PICTURES LIBRARY



An incredible collection of original cinematography available in all formats, cleared for your use.

Incredible Aerials
Cities
National Parks
Statue of Liberty
Nature Scenes
Sunsets & Clouds
Seagulls/Birds
Storm Waves
Hawaii
Tahiti
The Bahamas
Hang Gliding
Surfing & Sailing
Ballooning
Soaring
Skateboarding
Dunebuggying
Skiing

MACGILLIVRAY FREEMAN

AERIAL & ACTION SPORTS LIBRARY

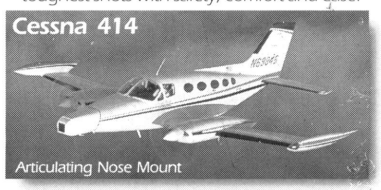
BOX 205, LAGUNA BEACH, CA 92652

RING 714/494-1055 FAX 714/494-2079

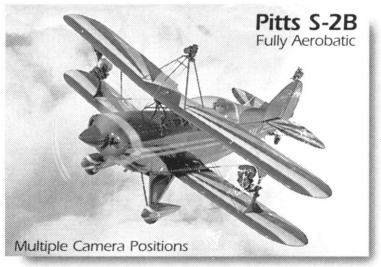
MacGillivray Freeman Footage is also represented by The Image Bank

We'll Get The Shot.

From ground level to 30,000 feet, from 70 to 200 MPH, air to air or air to ground, at virtually any angle, our aerial camera platforms are the ideal way to get your toughest shots with safety, comfort and ease.



▪ IWERKS ▪ Show Scan ▪ Vista Vision (ILM) ▪ Mitchell High Speed ▪ Light Max (IMAX Format) ▪ Panavision 16, 35, 65 & HDTV ▪ Arriflex 16SR, 535, BL, Arri III, IIC ▪ All Professional Video



▪ Most 16, 35 & 65 Film and Video Cameras
▪ In Cockpit Remote Control and Video Assist

AEROBATIC FILM SYSTEMS

6920 Hayvenhurst ▪ Suite 202 ▪ Van Nuys, CA 91406

(818) 997-0512 ▪ Fax (818) 997-0478

EQUIPMENT FOR SALE

SMS PRODUCTIONS, INC. RENTAL/SALES/SERVICE. BUY/SELL-USED MOTION PICTURE EQUIPMENT (312)738-0747.

ANGENIEUX 5.9mm lens, very clean $1,500; 7.5mm Century $1,000, Century 5.7 $1,000. Canon 300mm w/2X extender 2.8, very clean $3,200; COOKE 9x50mm $6,000; Zeiss 50mm B-mount $3,000; Angenieux 12x240 B-mount zoom, $1,500; 35mm format Zeiss speeds 18mm, 25mm, 35mm, 50mm, 85mm, just serviced $17,000. VISUAL PUSUIT, INC. (216)647-4999.

35 BL 1, 3 mags 400', 1 mag 1000', videoassist, Sony CCD color camera, baseplate, followfocus, prime blimp, 2 barneys, handgrip, medialogic speedcontrol, mint condition, Tel (212)226-5658 Fax (212)431-1471.

NOTICE: The VISUAL PURSUIT ads you see here are just a sample of the thousands of motion picture items we have available. All equipment comes with a money back guarantee. Call or fax us for a complete catalog. Phone (216)647-4999 Fax (216)647-4998.

PRO VIDEO & FILM EQUIPMENT GROUP. GIGANTIC USED INVENTORY. 6,000+ITEMS IN STOCK. VISA-MC, AMEX. (214)869-0011.

ARRIFLEX SR-I pkg: 10x100 Zeiss zoom lens, (2)400' magazines, onboard batteries, charger, right-hand grip, case just serviced $16,500. VISUAL PURSUIT (216)647-4999.

16BL, 2 mags, 5 speed crystal/vari. control (new), ang. 12-120 zoom, mattebox handgrip, case, $5,500. Tel (212)226-5658 Fax (212)431-1471.

NAGRA 4.2 recorder with case, extras, just overhauled $3000. Nagra I.S. power supply with built-in charger ATI $200. Nagra SLO $500. VISUAL PURSUIT (216)647-4999.

COMPLETE 5 ton grip truck with grip package and 475 amp tow generator (both well maintained). HMIs, Quartz lights, cables and grip equipment all in excellent shape. Call (303)665-4879.

ARRIFLEX BL IV package 3-1000' mags extension eyepiece with leveling rod video tap with CCD camera and all cables T.V. ground glass 1.85 ground glass full aperature gate pistol grip. D.P.'s private camera, never a rental serviced in 95 absolutely pristine condition $100,000 (314)727-6989.

PRO VIDEO & FILM EQUIPMENT GROUP. WE SPECIALIZE IN YOUR SATISFACTION.

ARRIFLEX image stabilizer kit with accessories $1,900. (216)647-4999.

ZEISS 35MM speeds 18/35/50/85mm, Zeiss 10-100T2 $7800, Zeiss 16mm speeds 9.5-25mm $7800, ext. eyepiece $1900, Zeiss 180mm $500, Nikor $180mm $500, Nikor 1000mm $500, Zeiss mutar (87mm front to 6mm) new $1500, Arri periscope finder $500, ang. zooms 12-120, 10-150, 9.5-57 $1400, Zeiss 10-100 T3* $1800, Tel. (212)226-5658 Fax (212)431-1471.

HIGHSPEED 16SR pkg: 2-400' magazines, 10x100mm T*2, right-hand grip, 2 onboard batteries, charger, VSU, factory overhauled Aug. 95 $35,000 or separately VISUAL PURSUIT (216)647-4999.

EQUIPMENT FOR SALE

PHOTOSONICS Actionmaster 500 camera package 12x120 ang 2-400' mags $14,000. VISUAL PURSUIT INC. (216)647-4999.

PRO VIDEO & FILM EQUIPMENT GROUP. 50 YEARS EXPERIENCE. (214)869-0011. FAX: (214)869-0145.

COOKE 14X70MM T3.1 zoom lens. Originally $43,000, as new & beautiful, $26,000. Call VISUAL PURSUIT (216)647-4999.

ARRI SR T-bar $5700, 16mm eyepiece $1000, SR mags $1900, Arri S mag $300. O'Conner 50 $1800, Nagra 4L $1800, Arri shoulderbrace $400. Tel (212)226-5658. Fax (212)431-1471.

AATON LTR 7 Pkg: 12x120 ang. zoom lens, 2-400' magazines, 2 onboard batteries, charger, right handgrip case $10,000. Other zooms available. VR 30 video tap also available. VISUAL PURSUIT (216)647-4999.

PRO VIDEO & FILM EQUIPMENT GROUP. MONEY BACK GUARANTEE ON ALL USED EQUIPMENT SOLD. (214)869-0011.

BOLEX Rex V package, Kern Paillard 18x100mm zoom, 2-400' mags, MST motor, Rex-O-Fader, cable and case, $2500. Call VISUAL PURSUIT. (216)647-4999.

NPR, 9.5-57 and 12-120 Angenieux lenses, 4 mags, 2 cases, cherry condition, one owner, extremely quiet. $4,500. Irola (213)621-7993.

PRO VIDEO & FILM EQUIPMENT GROUP. THE MOST RESPECTED NAME IN USED EQUIPMENT.

STEENBECK 6 plate flatbed model 1900 $4500. Intercine 6 plate flatbed editor $4000. Also available: rewinds, synchronize, moviscops, splicers. Call for details (216)647-4999.

BOLEX CAMERAS, accessories, super condition; **EYEMO 35MM** camera w/Arri mount, lenses: **16MM EDITING** equipment. (818)734-9400 Leave your name and fax number to receive detailed list.

ELEMACK Spyder Dolly, 2-seats, leveling head $7500. Call VISUAL PURSUIT (216)647-4999.

REPRESENTING THE WORLD'S LARGEST INVENTORY OF PRE-OWNED PROFESSIONAL MOTION PICTURE EQUIPMENT . . . entire camera rental house inventory for sale. Anamorphic prime lenses, adapters, de-squeezers***Arriflex BL 4***5XArriflex 35-3 MK I & II H.M.I. shutter***2, 3, 4, & 5 stage 5 x 6 & 6.6 x 6.6 matteboxes***12X Cooke 25-250 zoom lenses***5 x Arri follow focus 2***Optar prime lens set $16,500***200mm, 300mm, 400mm, 500mm, 800mm Canon Telephoto lenses***6 O'connor 100 fluid heads***15 crystal movie generators 400-2,500 amp***make-up & hair trailers***grip trucks***cranes & dollies***110 cameras for sale . . . fax or call THE POWER BROKERS for a list of pre-owned equipment. Phone (310)470-7569 . . . fax #1 (310)470-1150 . . . fax #2 (310)470-2877 Los Angeles.

ARRIFLEX Super 16 SRII package: Zeiss PL mount 12x120, 2-400' magazines, Ext. eyepiece, 4x4 mattebox, lt. wt. rods, 2 onboard batteries, battery charger, rt. handgrip $38,000. VISUAL PURSUIT (216)647-4999.

EQUIPMENT FOR SALE

35MM Eclair cameflex CM3 package: 3-400' magazines 4 prime lenses, motor, variable shutter complete shooting package $3,900. VISUAL PURSUIT (216)647-4999.

PRO VIDEO & FILM EQUIPMENT. FREE CATALOG. (214)869-0011.

STEADICAM IIIA FOR SALE. Modified sled #357, support arm, batteries X6, PAG charger, Seitz Follow Focus System with 2 Hedon motors and all brackets, lots of misc, cables, Video Transmitter, plus many more extras $30,000. Must Sell. Contact Julian in San Francisco (415)512-8822 or in Los Angeles at (310)393-5341.

ELEMACK Cricket Dolly: 2 seats, leveling head, studio and track wheels. Unbeatable price. Call VISUAL PURSUIT (216)647-4999.

ELMECH/Movie Tech Magnum dollies: complete systems with Mini Jib or Super Jib. Excellent condition. Call for complete details and pricing-VISUAL PURSUIT (216)647-4999.

ANAMORPHIC LENSES FOR SALE & RENT...22mm, 35mm, 50mm, 75mm, 100mm, 150mm, 200mm, 300mm & 500mm***Anamorphic rear of zoom adapters $4,000-$6,000 each***anamorphic zoom lenses...40-120mm, 40-240mm, 50-500mm***THE POWER BROKER. Phone (310)470-7569...Fax #1 (310)470-1150...Fax #2 (310)470-2877 Los Angeles.

O'CONNOR 50, 100 and 200. Fluid heads with or without legs. Call for details and list. VISUAL PURSUIT (216)647-4999.

FILM PRODUCTION EQUIPMENT: Fostex DAT recorder, TC generator, Sync slate. Two Arri BL 16's, crystal drives, Arri S/B, four telephoto Century lenses, with Arri mounts, Moviola editor. David (314)949-3481.

16MM MILLIKEN high speed camera pkg 500fps-VISUAL PURSUIT (216)647-4999.

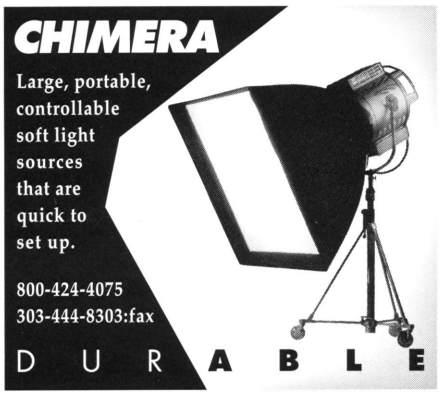
USED EQUIPMENT SPECIALISTS. GOOD ATTITUDE. COMPETENT STAFF. FAIR PRICES. INCREDIBLE SELECTION. PRISTINE QUALITY. WHAT MORE COULD YOU WANT? PRO VIDEO & FILM EQUIPMENT GROUP. (214)869-0011. FAX: (214)869-0145.

NEW & used HMI's 575-12K. Call us first. LIGHT SOURCE DENVER (303)777-3080.

PANAVISION camera. (Yes they actually sold a camera). Custom Arri-2C body converted by Panavision with PV mount (or Arri-PL) crystal motor base (never used) $8,500, two custom one of a kind over the shoulder type (low profile) 1000ft. magazines for 2C or 3 $6,500 each; Panavision underwater housing for 2C $7,500. Everything for $22,000.. Tel: (212)219-8408, Fax (212)219-8953.

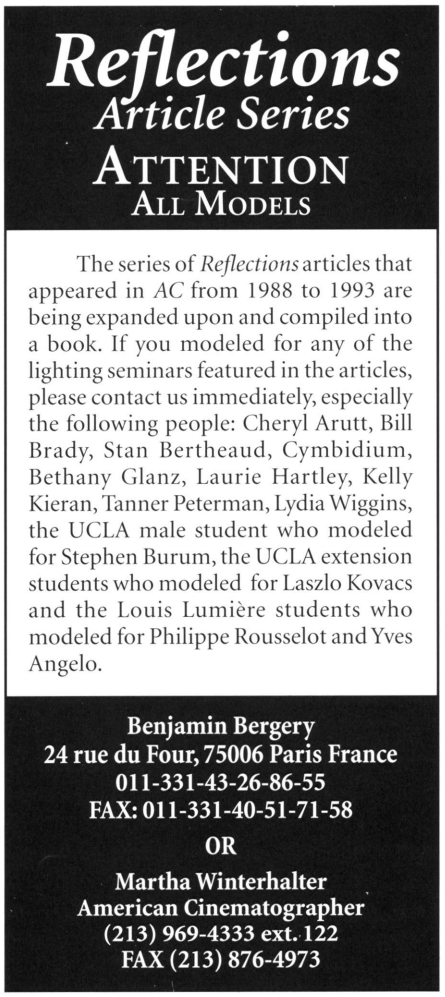
ARRIFLEX SRIII camera package: 10x100mm MKII Zeiss, 2-400' magazines, extension eyepiece, PL mount, time code, 4x4 mattebox, 2 onboard batteries, battery charger, rt. handgrip. Call VISUAL PURSUIT for best price (216)647-4999.

AATON XTR camera package: PL mount, 10x100 T*2 Zeiss, Super 16 switchable, 2-400' magazines, new time code upgrade, 2 batteries, charger, etc. Two available-Call VISUAL PURSUIT (216)647-4999.



Tools of the Trade...
Mark V Director's Viewfinder
The only viewfinder with 12:1 zoom & direct reading windows
alan gordon enterprises inc.
1430 Cahuenga Blvd., Hollywood, CA 90028
Phone (213) 466-3561 · Fax (213) 871-2193

DON'T LOSE YOUR HEAD!
We will renew your Fluid Head and overhaul it completely to be BETTER THAN NEW!
Write or call us for our super fast service and low prices.
2025 N.E. 151st St.
No. Miami Beach, FL 33162
(305) 949-9084,9085
NCE
OF FLORIDA, INC.


Reflections
Article Series
ATTENTION
ALL MODELS
The series of Reflections articles that appeared in AC from 1988 to 1993 are being expanded upon and compiled into a book. If you modeled for any of the lighting seminars featured in the articles, please contact us immediately, especially the following people: Cheryl Arutt, Bill Brady, Stan Bertheaud, Cymbidium, Bethany Glanz, Laurie Hartley, Kelly Kieran, Tanner Peterman, Lydia Wiggins, the UCLA male student who modeled for Stephen Burum, the UCLA extension students who modeled for Laszlo Kovacs and the Louis Lumière students who modeled for Philippe Rousselot and Yves Angelo.
Benjamin Bergery
24 rue du Four, 75006 Paris France
011-331-43-26-86-55
FAX: 011-331-40-51-71-58
OR
Martha Winterhalter
American Cinematographer
(213) 969-4333 ext. 122
FAX (213) 876-4973

Steady On!

Steadicam style mags.

Find out why top operators choose SL400 & SL200 extended throat mags.

CINE SL INC. TEL:213.733.7088 FAX:213.733.1462

• Sales
• Rentals
• Service

Call or write for our 1996 Mini Catalog

alan gordon enterprises HOLLYWOOD, CALIFORNIA 1996

alan gordon enterprises inc.

1430 Cahuenga Blvd., Hollywood, CA 90028
Phone (213) 466-3561 · Fax (213) 871-2193

EXPERT LENS SERVICE
CALL CENTURY!

✔ All Types Cine/Video ✔ Fast Turn-around
✔ 40 Years Experience ✔ Custom Work
Century Precision Optics **1-800-228-1254**
10713 Burbank Blvd. No. Hollywood, CA 91601
Ph: 818-766-3715 Fax: 818-505-9865

HIGH QUALITY MOTION PICTURE
PROCESSING
We Buy and Sell Raw Stock

COMPARE OUR LOW PRICES!
35mm Color Neg. **.10¢** per ft.
*16mm Color Neg. **.10¢** per ft.
35mm Daily Prt. **.12¢** per ft.
Video Services Available
**Including Super 16mm*

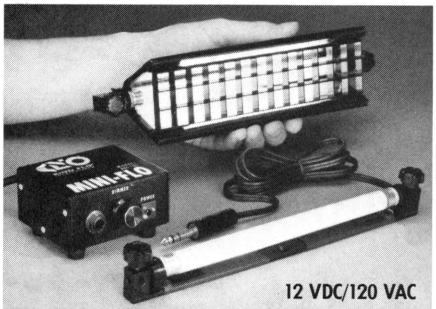
RGB
COLOR LAB
816 N. Highland Ave.
Hollywood, CA 90038
213/469-1959

HISTORY BY MANKIND.

FOOTAGE BY ARCHIVE.

14,000 phenomenal hours of historical and entertainment footage. Plus 20,000,000 historical photographs. Computer-cataloged, copyright-cleared, ready to roll.
Call, fax or write for a free brochure and sample reel.
ARCHIVE FILMS
800-876-5115
530 W. 25th St. NY, NY 10001
Tel. (212) 620-3955 Fax (212) 645-2137

QUALITY LENS SERVICE
Fujinon ■ Canon ■ Angenieux ■ Cooke ■ Zeiss ■ Schneider ■ Etc.
Now Available From:
WHITEHOUSE AUDIO VISUAL
2696 Lavery Court, No. 8
Newbury Park, CA 91320
(805) 498-4177 FAX (805) 499-7947



12 VDC/120 VAC

MINI-FLO
FLUORESCENT SYSTEM
► IDEAL FOR CAR INTERIORS/TABLE TOP
► COLOR CORRECT 32K° & 55K°
► DIMMABLE & FLICKER-FREE
KINO FLO® incorporated
FOR CATALOG CALL: (818) 767-6528

CINE SOUND 5
SOUND PRODUCTION EQUIPMENT
SALES · SERVICE · RENTALS
Communication equipment, Microphones, Wireless, Tape Recorders, Mixers, Etc.
Dealers for:
AKG, Neumann, Schoeps, Shure, Tram, Sennheiser, Beyer, Micron, Audio Ltd., Denecke slates, Canare cables, 3M Tapes, LWS zeppelins & poles, Kangaroo Cases, LTM poles, Anchor speakers, Motorola accessories, Pelican cases, Switchcraft, etc.
We also sell Duracell Batteries, Vega, Sony Headsets, Recorders with Crystals, ComTEK, Rycote Products, Sound Carts, Etc.
Used Nagras, Mics, Wireless, Sela, etc.
We Trade, Buy & Sell, used Sound equipment
We rent new Motorola Walkie Talkies

SAVE MONEY - BUY OR RENT FROM US
10755 B Magnolia Blvd.
North Hollywood, CA 91601
(818) 845-6496 Fax (818) 762-3585

EQUIPMENT FOR SALE

SUN TRACKING SOFTWARE sunPATH™ for Macintosh 39,000+ Location Database (818)764-3639 widescreen@pobox.com

VIDEO taps for Arri-S or 2C also Arri-35 BL cameras fits on viewfinder new $649 with case, power supply, etc. MKA (212)219-8408 fax (212)219-8953.

ZEISS T*1.3 new style Super speed primes with PL mount 9.5, 12, 16, 25mm set call VISUAL PURSUIT (216)647-4999.

WANTED

BEAULIEU SUPER 8 CAMERAS WANTED !! Will pay up to $300 cash for functioning & nonfunctioning Beaulieu cameras. Call Doug at (818) 848-5522, 9:30-5:30.

WANTED steadicams, cameras, lenses, tripods etc for cash. Derrick, WHITEHOUSE A/V (805)498-4177, fax (805)499-7947.

WANTED Arri 35-3 PL with accessories. Call Alex (504)866-3870.

16 & 35MM CINEMATOGRAPHERS: The world's leading contemporary stock footage library is looking for all subjects. Join some of the most prestigious collections for stock footage representation. Call (818)508-1444.

WE WANT GOOD USED EQUIPMENT. TOP DOLLARS PAID. PRO VIDEO & FILM. (214)869-0011.

WANTED: CAMERAS 35MM & 16MM, SOUND EQUIPMENT, FLUID HEADS, LIGHTING, ETC. Best cash prices paid. Consignment also available. Contact Pete Anway, BIRNS & SAWYER, INC. 1028 N. Highland Ave., Hollywood CA 90038, (213) 466-8211.

CASH FOR YOUR EQUIPMENT. PRO VIDEO & FILM. (214)869-0011.

MOTION PICTURE EQUIPMENT wanted top dollars paid. S.G.E. INC. (510)704-5588.

CASH FOR YOUR EQUIPMENT NOW Motion picture equipment, 16mm or 35mm wanted: cameras, lenses, tripods, dollies, cranes, lighting, editing equipment. VISUAL PURSUIT, INC. (216)647-4999 OR FAX LIST (216)647-4998.

CONSIGNMENT EQUIPMENT WANTED. FAST RESULTS. CASH ADVANCE & BUYOUT OPTIONS. CALL FOR DETAILS. PRO VIDEO & FILM. (214)869-0011. FAX: (214)869-0145.

CINEMATOGRAPHERS: Well-known stock footage company is looking for timelapse, scenics, sports, nature footage to represent. Non-exclusive or exclusive basis. (818)905-1071, FAX (818)905-0301.

CINEMATOGRAPHERS: Earn royalties on your film. North America's leading stock footage library seeks beauty, landmarks, people, scenics, sports and more. We have telecine. Call for more info. FABULOUS FOOTAGE. (617)237-6555 or (213)463-1153.

SERVICE AVAILABLE

CP-16R OVERHAUL, complete rebuild and repaint, parts, labor, 90 day warranty: $995. Also call us for lens service. WHITEHOUSE A/V (805)498-4177, Fax (805)499-7947.

REPAIRS: CAMERAS, LENSES, LIGHT METERS, AND OTHER MOTION PICTURE EQUIPMENT. IN-HOUSE SERVICE, QUICK TURN AROUND. SMS PRODUCTIONS, INC., (312)738-0747.

QUALITY CAMERA SERVICE: Complete repair & machine shop, parts dept., & top experienced technicians are available at Birns & Sawyer, Inc., to service your camera, lenses, tripods & related equipment. Send in your equipment for an estimate to our Service Dept. (213) 466-8211. Peter Anway, BIRNS & SAWYER, INC., 1026 N. Highland Ave., Hollywood, CA 90038.

BOLEX-ECLAIR factory trained service, equipment & accessories available at **PROCAM**, 22048 Sherman Way Ste. 105, Canoga Park, CA 91303. Phone: (818)346-1292, Fax (818)346-7712.

INCORPORATE without legal fees! Free Booklet, Call Now! 800-345-2677.

SITUATION AVAILABLE

EXPERIENCED CAMERA/ OPTICAL REPAIR TECHNICIANS NEEDED. Must have minimum 5 years experience. Excellent benefits, growth opportunity. Salary commensurate with experience. Will relocate qualified applicants. Send resume to: **PANAVISION NEW YORK** 540 West 36th Street, New York, NY 10018 Attn: Scott Fleischer. All replies will be kept strictly confidential.

PROFESSIONAL TRAINING

ROBERT BORDIGA'S NUTS & BOLTS PRODUCTION SEMINAR For anyone seeking a comprehensive understanding of film and television production. **"By the end of this course you feel like you've just finished making a movie."**-Yudi Bennett, First AD, STAR TREK-GENERATIONS. NY/LA, March and June. 1-800-755-7763.

CineMid-Atlantic®

Arriflex/SONY
CAMERA RENTALS
410-247-6959
1500 J CATON CENTER DR.
BALTIMORE, MD 21227

FILM & TV SUNRISE / SUNSET COMPASS
Worldwide. Simple to use. No electronics.
FLIGHT LOGISTICS (U.K.)
(+44) 181 575 0528 fax order (+44) 181 813 1455
Mastercard, Visa or Amex. $40. inc. p.p.
Provide your full Name, Card no. and Expiry Date

KAYE LITES
Owner operated lighting & grip trucks and vans
Phone: 617-932-0005
Fax: 617-932-0006
Serving New England

Time Lapses
STOCK FOOTAGE
Wildlife
Water
People
Scenics
Greg Hensley PRODUCTIONS
and more (970) 927-9198

WIRELESS VIDEO
BE-320 Miniature Microwave
Introducing Premier Wireless' exciting new Wireless Video Communications Systems. Designed with proprietary technology that provides performance superior to other similar products. Professionals now have the ability to distribute video on either fixed or mobile applications with a system that is lightweight, compact, installs in minutes and is low cost.
Features include full colour video and audio, four user selectable channels, range to 2.5 miles (consult Miller for longer range options), NTSC or PAL signal formats and can easily attach to NPI or Anton Bauer battery packs.
The applications are endless, Live Broadcast, Video Conferencing, Distance Learning, Video Assist, Security and Surveillance and anywhere else wireless video distribution is needed.
MILLER WIRELESS UNLIMITED
3212 Northwest Ave., Suite C, Box 221
Bellingham, WA 98225
Tel: 360/715-3328 Fax: 604/685-5648
MILLER TRIPODS CANADA
1055 Granville Street
Vancouver, B.C. V6Z 1L4
Tel: 604/685-4654 Fax: 604/685-5648

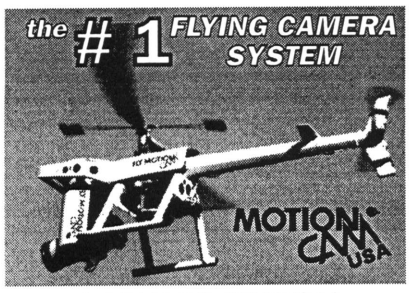
Shoot
CANCUN
Cine South de Mexico presents the only Caribbean beach devoted *exclusively* to film production: virgin beach, palm groves, crystal clear water, a tiny tropical island... *and complete production services!*
CALL FOR A BROCHURE OR A BID!
U.S. Tel: 213/876-3879 Fax: 213/851-6004
Mexico Tel: 011-525-684-0869 Fax: 679-7097

Revolutionary
FILM SCHOOL
with Dov S-S Simens
only 2 DAYS
...If you haven't Produced, Directed or Distributed a Feature Film... ...You haven't taken this course!
LOS ANGELES
Mar 23-24 or May 11-12
WORLD TOUR
DENVER: Mar 2-3
NEW YORK: Mar 9-10
PHOENIX: Mar 16-17
VANCOUVER: Mar 30-31
CHICAGO: Apr 20-21
ATLANTA: Apr 27-28
Can't Attend? Can't Wait?
AUDIO FILM SCHOOL™ Available
only
$289
CYBERSPACE FILM SCHOOL™
http://HollywoodU.com/
HFI, PO Box 481252, LA, CA 90048
800-366-3456
HOLLYWOOD FILM INSTITUTE

If you write scripts, you need...
Scriptware®
Professional scriptwriting software for the PC
"Scriptware is the best." Syd Field, *Screenplay*
Now for Windows™!
Call today for Special Prices! 800-788-7090

YALE
LABORATORY, INC.
1509 NORTH GORDON STREET
HOLLYWOOD, CA 90028
213-464-6181
800-955-YALE
CUSTOM COLOR NEGATIVE SERVICES
16 COLOR REVERSAL
16 BW REVERSAL & NEGATIVE
SUPER EIGHT E-160 BW
SUPER EIGHT IN SALES & RENTALS
FILM TO VIDEO TRANSFERS
BETACAM SP
RUSH SERVICES
MAIL ORDERS
MC & VISA

ACTION
Sports Cinematography
STOCK FOOTAGE LIBRARY
SURFING
WINDSURFING
VOLLEYBALL
SKATEBOARDING
SNOWBOARDING
ROLLERBLADING
RIVER RAFTING AND MORE!
SCOTT DITTRICH FILMS
P.O. BOX 301 MALIBU, CA 90265
(310) 459-2526 FAX (310) 456-1743



A NEW DIMENSION IN ACTION PHOTOGRAPHY !

If conventional tools can't do it, our remote-controlled 35mm camera helicopter is perfect for the job !

For Tech.Specs., Prices & Demo Reel, Call

T: 805/295-0707 F: 805/295-5006

31229, Quail Valley Road
Castaic CA 91384

CHANNEL DOLLY KIT

$675.00

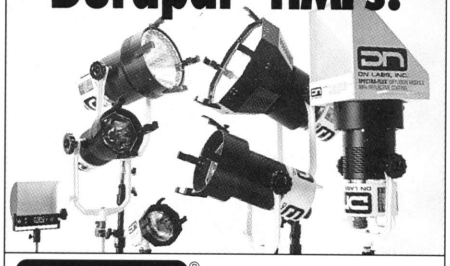
(602) 945-6428

WILLY'S WIDGETS

4531 N. 87th Place
Scottsdale, AZ 85251

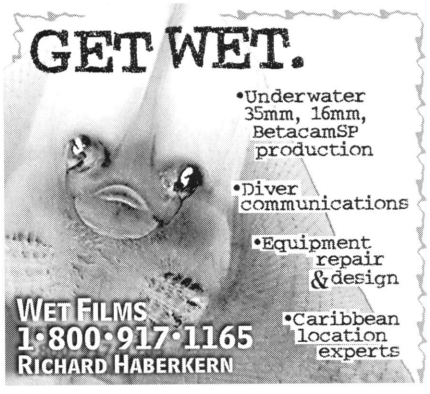
For Catalog send
2 First Class Stamps

Durapar® HMI's.



DN LABS, INC.

Systems from 200W-6KW.



EARN MONEY WITH FABULOUS FOOTAGE

Earn royalties for the long term and generate significant revenues through stock footage licensing. Some of our more senior DP's earn annual six figures on shots that are in the can. If you have top quality film that meets our high standards, give us a call. We'd like to talk about *your* fabulous footage. To talk to the world's leader dedicated to marketing only stock footage, call our acquisitions office at 617-237-6555

Fabulous Footage Inc.®
The complete stock film/video library

SUPER8 SPECIALISTS

- ALL SUPER8 STOCKS
- RUSH PROCESSING
- VIDEO TRANSFERS
- NEW/USED EQUIPMENT
- RENTAL SERVICES
- SUPER8 REPAIRS

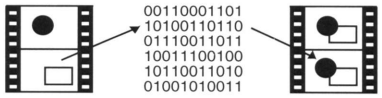
TRY OUR NEW SUPER8 COLOR NEGATIVE FILM!

Super8™ SOUND

Boston 617•876•5876

Los Angeles 818•848•5522

Film to Digital Digital to Film



High Resolution Pin Registered 35mm Film Scanning and Recording

Scanning—Dry or Liquid Gate—at the resolution and digital format you require. **Recording** digital files or video to 35mm film at the highest resolution.

Contact David Schwartz
212-586-4822
Cineric Inc.
321 West 44th Street
New York, NY 10036

Masters in Optical Photography, Restoration, and Theatrical Productions for over 25 years.

Advertisers Index

AC 103, 108
A & J Cases 84
Action Sport 107
Adolph Gasser 82
Aerobatic 102
Alan Gordon 103, 104
Ambient 10
Archive Film 104
Arriflex 33

Backstage Equipt. 99
Benjamin Centoducati 101
Birns & Sawyer 15, 78
Bogen Photo 51
Bolex 89
Boston Camera 90
Boston Film Factory 97
Brooks Inst. 100
BTS 23, 101

Camera Essentials 107
Camtec 62
Century Precision 67, 99, 104
Chambless 88
Chapman 107
Chesapeake Camera 107
Chimera 103
Cine Mid-Atlantic 105
Cine Power 96
Cine Radio 12
Cine Rental 101
Cine Sound 5 104
Cine South 105
CineAsst 103
Cinekinetic 25
Cinema Products C-2
Cinematography Electronics 24
Cinemills 52
Cinequipt 98
Cineric 106
Cinovation 105
Clairmont 8, 9, 63, 99
Clamp Flag 103
Columbia College 71

D/Vision Systems 13
Denecke 18
Dittrich, S. 105
DN Labs 106

Eastman Kodak 45
Energy Productions 103

Fabulous Footage 106
Film Video 34
First Light 76
Fish Films 107
Fletcher Chicago 87
Flight Logicstics 105
Foto-Kem 35
Four Designs 107
Fries Engineering 90
Fuji Motion Picture 7

Geo Film 84
Great American 58, C-4
Greg Hensley 105

Hand Held 34, 75
HHB Communications 17
Hollywood Film Inst. 105
Hybrid Cases 102
Hydroflex 103

Image G 92
Image Maker 107
Innovision 95
Int'l Cinema 81
Int'l Film & TV Workshop 91
Isaia & Company 98

Janice Arthur 14
JBK Cinequipt 107

K&H Products 95
Kaye Lites 105
Kenworthy 14
Kinoflo 97, 104

Lightning Strikes 109
London Intl. 101
Lynx Robotic 97

MacGillivray 102
Matthews 107
Media Light 100
Miller Canada 105
Miller Fluid Heads 4
MKA 20
Mole Richardson 14
Motioncam 106
Movie Camera Company 109
Movie Tech 71
Moving-Cam 95
Musco Mobile 66

N.Y. Film Academy 83
Nalpak 82, 87
NCE of FLA 103, 107
Norris Film 82

O'Connor Engineering 81
Oppenheimer 64
Optical Text 77
Otto Nemenz 21

P.E.D. Denz 26, 27
Panavision Corporation 59, C-3
Panavision Fla. 77
Panavision Hollywood 1
Panther GMBH 6
Peter Lisand 107
Power Broker 90
Preston Cinema Systems 49
Prime Time Post 22
Prime TV 72
Prosource 101

Quantel 5

RGB Color 104
Rocky Mountain 107
Roessel Cine 83
Roos Film 6

Sachtler AG 11
Schumacher 55
SL Cine 104
SMS Productions 107
Sonosax 92
Sony 19
Spacecam 31
ST Productions 107
Stanton Video Services 78
Steadicam 4
Steenbeck 84
Super 8 Sound 106
Tape House 75

UCLA Ext. 65

Vancouver Film 72
Viking Generators 24
Visual Pursuit 100

Weaver/Steadman 43
Wescam 57
Wet Films 106
Whitehouse 104
Willy's Widgets 106
WRS 2

Yale Lab 105
Yuri Neyman 96

ZGC, Inc. 87, 92

Peter Lisand's ADJUST-A-GRIP

PROVIDES SHOOTING RELIEF TO THE PROFESSIONAL CAMERAPERSON

Designed to work with most ENG cameras,the ADJUST-A-GRIP allows you to rotate and extend your camera's pistol grip to give your arm, elbow and wrist optimal shooting comfort.

Also available with matte box adaptor

Peter Lisand 352 River Road Edgewater, NJ 07040

For More Information, Call (201) 943-5600

Call for a full line catalog and ask about our custom camera accessories

Director's Viewfinder.

- 18-150mm
- 35mm Format
- 1.37, 1.66, 1.85, 2.35
- Compact & Accurate

CAMERA ESSENTIALS

✆ 213-666-8936 FAX 213-666-0214

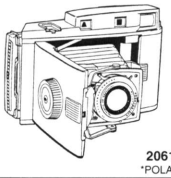
SPORTS Is Our Middle Name

Exclusive Footage: (35mm, 16mm, Video)

- U.S. World Cup Soccer • Olympics
- Professional, extreme, & recreational sports

ACTION SPORTS ADVENTURE

Phone: 212-721-2800 Fax: 212-721-0191



PROFESSIONAL POLAROID* CAMERAS FOR EXPOSURE AND LIGHTING EVALUATION

SOLD-SERVICED-MANUFACTURED

CALL FOR COMPLETE INFORMATION

800-468-3399 - 360-887-1555

FAX 360-887-1549

FOUR DESIGNS CO.

20615 NE 22nd AVE. RIDGEFIELD, WA 98642

*POLAROID is a registered trademark of the Polaroid Corp.

The afforable NCE Hydrofluid "DUTCH HEAD"

The "T" handle eliminates the need for two handles. Ideal ALL cameras.

N.C.E. OF FLA

Motion Picture & TV Equipment

2025 N.E. 151st Street, N. Miami, FL 33162

Phone:(305) 949-9084 FAX (305) 949-9085

MOVIECAM COMPACT

Complete Feature Packages Available for Rental

PL or Panavision Mounts

For Info. (801) 649-1030 or (818) 760-2113

ROCKY MOUNTAIN MOTION PICTURES®

BLOW IT UP !!!

8/S8/16/S16/35mm to **S8/16/35/65mm**

Titles and Opticals to Film / Disk / Tape

ST Productions (818) 846-3939

stprods@indycine.com http://www.indycine.com/st/

MOTION PICTURE EQUIPMENT SERVICE

Aaton, Arri, Bolex, CP, Eclair, Switar, Zeiss, Angenieux, etc.

SMS PRODUCTIONS, INC.

1327 W. Washington Blvd. #103 Chicago, IL 60607

(312) 738-0747 Fax (312) 738-0564

Chapman / Leonard

Studio & Production Center

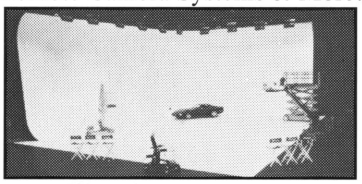
Orlando, Florida

'State of the Art in Quality and Service'

Fully Equipped 9000 Sq Ft Sound Stage

Chapman Cranes, Dollies & Pedestals

Remote Camera Systems & More!



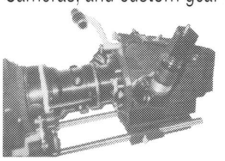
50' X 60' X 26' Hard Cyc

Ask for a video on our facility!

(407) 851-3456

NEW CCD EYEPIECE

Call/Fax for a new brochure on the Tilt Plates, Rocker, Hand Held Support & other prod. Precision service & repair for Mitchell, Arri, C.P. Cameras, and custom gear for your needs.



JDK CINEQUIPT

TEL: 510-562-2300 FAX: 510-562-8065

1933 Davis St., Ste. 273 San Leandro, CA 94577

caribbean

PERMITS, CUSTOMS CLEARANCE LOCATIONS SCOUTS, CREWS, GRIP AND LIGHTING EQUIPMENT

IMAGE MAKER PRODUCTIONS

PHONE/FAX: 809 774 0050

CHESAPEAKE CAMERA

ARRI-35 • AATON 35

AATON PROD 16

Quality Camera Rental in the MID-ATLANTIC REGION

410-789-0894

FISH FILMS FOOTAGE WORLD™

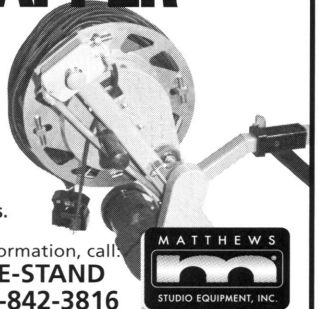
"EVERY SUBJECT KNOWN TO MAN"

"Instant Turnaround" "Free Research"

818-905-1071 Fax: 818-905-0301

THE RAPPER JR.™

Compact version mounts on the trailer hitch. May be ordered in 120vAC, 90vAC or 12vDC models.

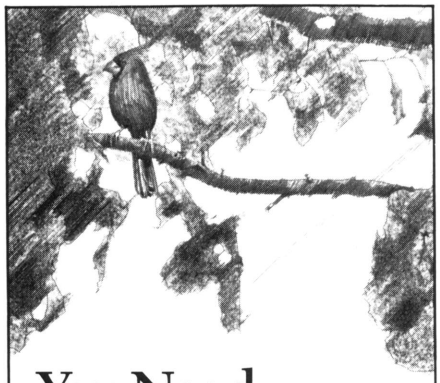


For more information, call:

1-800-CE-STAND

FAX: 818-842-3816

MATTHEWS STUDIO EQUIPMENT, INC.



You Need Tree City USA

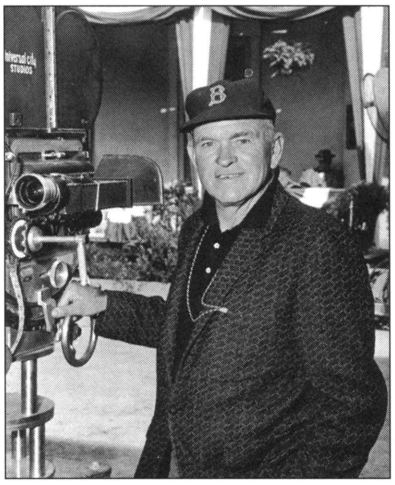
City trees add the soft touch of nature to our busy lives. They cool our cities, fight pollution, conserve energy, give wildlife a home, and make our neighborhoods more liveable.

The trees on city property, along streets and in parks, are an essential part of the urban forest. To keep these trees healthy and abundant, your town needs an organized program for their care...an annual action plan to plant and prune the city's trees, and to maintain their health.

Support Tree City USA where you live. For your free booklet, write: Tree City USA, The National Arbor Day Foundation, Nebraska City, NE 68410.

The National Arbor Day Foundation

In Memoriam



William J. Clothier, ASC, the cinematographer who deservedly became known as "King of the Westerns," died on January 7, 1996 after a long illness. He was 92 and had been an ASC member since 1965.

Clothier is best known for his photography of spectacular Westerns and a long association with such greats in the genre as John Ford, William A. Wellman, John Wayne, Andrew McLaglen and Howard Hawks. He was, however, a highly versatile artist who amassed a large body of work after entering the field some 72 years ago. In the course of his career he also found high adventure.

Born in Decatur, Illinois on February 21, 1903, Clothier served in World War I. He came to California in 1923 and worked as a painter at Warner Bros. and as an assistant cameraman at several Poverty Row studios, including California, Walcott and Chadwick. He got on the *Wings* aerial camera crew at Paramount in 1926 and remained with the studio until 1929, when he moved to RKO as an operator, second-unit cinematographer and aerial cameraman. There he worked on *King Kong, The Lost Squadron* and many others.

Grounded by a strike in 1933, he became a director of photography in Mexico City, where he photographed several features. Receiving an offer to photograph Spanish-language features in Spain, he worked in that country from 1934 until 1938, when he was imprisoned as a hostage by the Communist forces. After the U.S. secured his release, he returned to California, where he found it difficult to get work as a first cameraman. He returned to operating for Joseph August, ASC and also shot second units and aerials. With the outbreak of World War II he joined the Army Air Force as a captain. He flew 25 combat missions with the 8th Air Force, including 17 missions on the storied B-17 bomber *Memphis Belle.* After three years and eight months he mustered out as a lieutenant colonel. He returned to Mexico City in 1948 as director of photography of Mexico's first color feature, the bilingual *Sophia, City of Intrigue* in Cinecolor.

Returning to Hollywood, he specialized for a time in aerial work for such pictures as *Jet Pilot, The High and the Mighty,* and *Island in the Sky.* In the early 1950s he began photographing the big action pictures that earned him his title. Some are classics: *Track of the Cat, The Sea Chase, Blood Alley, Seven Men From Now, The Horse Soldiers, The Comancheros, Merrill's Marauders, Donovan's Reef, McClintock!, The Deadly Companions, The Man Who Shot Liberty Valance, Cheyenne Autumn, Shenandoah, The Rare Breed, The Way West, The War Wagon, Firecreek, The Undefeated, The Cheyenne Social Club, Bandolero, Chisum, Rio Lobo, Big Jake.* He received Academy Award nominations for *The Alamo* and *Cheyenne Autumn.* After completing the John Wayne picture *The Train Robbers* in Mexico in 1972, he retired from filmmaking.

Bill Clothier is survived by his wife, Carmen, his daughter, Mirabel DiDonato, and two grandchildren. Memorial services were held on January 12 at the Old North Church of Forest Lawn Cemetery, Hollywood Hills. Donations in his memory should be directed to his favorite charity, a home for needy children and outreach ministry: The Foundation for His Ministries, P. O. Box 9803, North Hollywood, CA 91609-1803.

In Memoriam

Hugh K. Gagnier, ASC, Canadian-born cinematographer and director, died of cancer in Valencia, California on December 21, 1995 at the age of 71. Gagnier had worked in motion pictures and television for most of his adult life.

Born in Montreal on April 29, 1924, Gagnier was a graduate of Montreal's Loyola College. During World War II he joined the Royal Canadian Navy and served on active duty with the North Atlantic Fleet. Soon after returning to Canada in 1945 he became a newsreel cameraman for five years, working as Canadian correspondent for Twentieth Century-Fox Movietone, MGM Metrotone, Universal Newsreel and Paramount News. For two years he was an animation cameraman for Associated Screen News. During 1952 he covered all NHL hockey games for the Canadian Broadcasting Corporation.

By 1960 he was working in the U.S. as a live TV news cameraman for CBS and ABC, covering the Army-McCarthy Senate hearings, the 1960 Democratic Convention, the Pendleton Roundup, the Winter Olympics and other events. Moving into live dramas and comedy shows, he worked on *Climax, Westinghouse Studio, The Red Skelton Show, Shower of Stars, The Jack Benny Show, Bob Crosby* and many more. He worked on all episodes of the most acclaimed of live drama shows, *Playhouse 90,* and was head cameraman on the *Steve Allen Show, Burl Ives Show* and others. Between shows he made commercials, winning best photography awards for U.S. Royal and Scotchgard spots in 1961 and 1963.

After earning membership in IATSE Local 659 in Los Angeles, Gagnier became a first assistant cameraman on theatrical features and TV shows for many of his heroes in the field. Some of his TV assignments were *Rawhide, The FBI, Hogan's Heroes, Gunsmoke, The Wild Wild West,* and *Dragnet.* Features at this time included *Winning, Duel at Diablo,* and *A Man Called Horse.* In 1969 he was designated as an operative cameraman, and by 1976 had worked on such acclaimed features as *Butch Cassidy and the Sundance Kid, Judge Roy Bean, Chinatown* and *One Flew Over the Cuckoo's Nest,* as well as other major features and nine TV series.

In 1976 he was made a director of photography. He headed the second unit of Universal's *The Other Side of the Mountain Part II,* and shot the second half of Paramount's *Goin' South* for director/star Jack Nicholson. Thereafter, he concentrated on television production. He photographed the entire runs of *Knot's Landing* for Lorimar, and MTM's *White Shadow.* Among his other credits, including Movie of the Week entries, are *Maneaters Are Loose* (Finnegan), *Good Old Boys* (Finnegan), *The Operating Room* (MTM), *Aunt Mary* (Jaffe), *The Waltons* (Lorimar), *Spiderman* (Fries), *Foul Play* (second unit, Paramount), *Jessica Novak* (20th-Fox), *Adam's House* (20th-Fox), and *Six Pack* (pilot, 20th-Fox).

Gagnier was a member of the Directors Guild of America and took a strong interest in encouraging women to enter the field of cinematography. He was one of the few male members of Women in Film, for which he held seminars in cinematography.

A lifelong student of cinematography, Gagnier attributed much of his career to the influence of the many camera artists with whom he had worked, particularly fellow ASC members Conrad Hall, Richard Moore, John Alonzo, and Haskell Wexler. He also spoke fondly of his work with directors George Roy Hill, John Huston, Roman Polanski and Milos Forman.

He is survived by his wife, Eleanor; two sisters and a brother; five children, Hugh Jr. (and his wife, Kim), Robert, Patricia, Suzanne and Holly; and two grandchildren. A Memorial Mass was held on Wednesday, December 27, at St. Charles Borromeo Catholic Church in North Hollywood. Internment followed at Forest Lawn Cemetery, overlooking the Hollywood Hills. Donations to his memory can be made to St. Jude Shrine, 312 W. Saratoga Street, Baltimore, MD 21201-1803.

MCC
The Movie Camera Company Limited
Lights – Cameras – Grips
Committed to serving the film and TV industry on the African continent with the latest in technology and expertise
Africa's largest rental house
South Africa – Namibia – Botswana
Zimbabwe - Malawi – Kenya – The Middle East
Mauritius – Comores – Seychelles

Contact Numbers:
Johannesburg
+27 11 8874420
+27 11 8874456
Cape Town
Tel +27 21 5113073
Fax +27 21 5112317

WHO DO YOU CALL WHEN YOU WANT 70,000 WATTS OF SIMULATED LIGHTNING?
LIGHTNING STRIKES!
patented
800-321-3644
Fax: 213/461-3067
6571 Santa Monica Blvd., Hollywood, CA 90038 USA

Atlanta	Victor Duncan	404-457-4550
Boston	Bob Potter	401-423-3244
Chicago	Victor Duncan	312-267-1500
Dallas	Victor Duncan	214-869-0200
Detroit	Victor Duncan	810-471-1600
Nashville	Tek Lighting	615-370-3694
New York	Bob Potter	212-243-3164
Orlando	Steve Heller	407-896-7960
Amsterdam	Techniq/TLC Prod.	3120-692-0441
Auckland	Prof. Lighting Services	64-9-5252200
Bangkok	Siamlite	662-254-7268
Beijing	Hua Yuan	861-202-5380
Berlin	Dedo Weigert	49-30-6704-4487
London	Cirro Lite	4481-964-1232
Mexico City	LP Associados	52-36-20-0513
Milan	Technovision	392-2622-7492
Montreal	Moli-Flex/White	514-939-1989
Munich	Dedo Weigert	49-89-35-616-01
Paris	Key Lite	331-4984-0101
Rome	Technovision	396-6615-778
Sydney	Reg Garside	61-2-4525972
Taipei	Tai Shun Movie Equip.	8862-975-7738
Tokyo	Sanwa	813-5210-3801
Toronto	William F. White	416-252-7171
Vancouver	William F. White	604-983-5300

American Society of Cinematographers

March 1996 Roster

Officers -1996
Victor J. Kemper,
President

Steven B. Poster,
Vice President

Owen Roizman,
Vice President

Robert Primes,
Vice President

Howard A. Anderson, Jr.,
Treasurer

John Bailey,
Secretary

Richard C. Glouner,
Sergeant-at-Arms

Members of the Board
Stephen H. Burum
Stanley Cortez
Dean R. Cundey
Allen Daviau
Linwood G. Dunn
Laszlo Kovacs
John Toll
Vilmos Zsigmond

Alternates
Caleb Deschanel
George Spiro Dibie
Gerald Perry Finnerman
John C. Hora
Mikael Salomon

Active Members
John A. Alonzo
Herbert Alpert
Murray Alvey
Howard Anderson
Monroe Askins
Tony Askins
Charles Austin
James Bagdonas
King Baggot
John Bailey
Michael Ballhaus
Andrzej Bartkowiak
Frank Beascoechea
Andres Berenguer
Manuel J. Berenguer
Carl Berger
Donald Birnkrant
Joseph Biroc
Ralf Bode
Haskell Boggs
Richard Bowen
Edward R. Brown
Joseph Brun
Don Burgess
Stephen H. Burum
Wilmer C. Butler
Taylor Byars
Bobby Byrne
Robert Caramico
Russell Carpenter
Gu Changwei
Michael Chapman
Curtis Clark
William T. Cline
Jack Cooperman
Charles Correll
Stanley Cortez
Jack Couffer
Vincent G. Cox
Jordan Cronenweth
Dean R. Cundey
Allen Daviau
Roger Deakins
Jan DeBont
Thomas Del Ruth
Caleb Deschanel
George Spiro Dibie
Ernest Dickerson
Victor Duncan
Bert Dunk
Linwood G. Dunn
John Dykstra
Richard Edlund
Fred Elmes
John Elsenbach
Geoffrey Erb
Gerald Perry Finnerman
John C. Flinn, III
William A. Fraker
A.C. Francis
Ron Garcia
Maury Gertsman
James M. Glennon
Richard C. Glouner
Stephen Goldblatt
Jack Green
Adam Greenberg
Robbie Greenberg
Robert G. Hager
Conrad Hall
Gerald Hirschfeld
Seymour Hoffberg
Adam Holender
John C. Hora
Eric Horvitch
Michel Hugo
Judy Irola
Mark Irwin
Andrew Jackson
Peter James
Johnny E. Jensen
Robert C. Jessup
Torben Johnke
Frank Johnson
William K. Jurgensen
Janusz Z. Kaminski
Victor J. Kemper
Wayne Kennan
Jan Kiesser
Jeffrey L. Kimball
Richard Kline
George Koblasa
Fred J. Koenekamp
Lajos Koltai
Laszlo Kovacs
Neil Krepela
George La Fountaine
Edward Lachman
Ken Lamkin
Charles B. Lang
Stevan Larner
Andrew Laszlo
Matthew Leonetti
James F. Liles
Robert F. Liu
Karl Malkames
Isidore Mankofsky
Michael D. Margulies
Jacques R. Marquette
Enzo A. Martinelli
Vincent Martinelli
Don McAlpine
John McPherson
Terry K. Meade
Rexford Metz
David Millin
Richard Moore
Robert C. Moreno
Donald M. Morgan
Dennis Muren
Brianne Murphy
Hiro Narita
Michael Negrin
Sol Negrin
Meredith M. Nicholson
Kemp Niver
Sven Nykvist
Woody Omens
Emil Oster
Kenneth D. Peach, Jr.
James Pergola
Don Peterman
Alex Phillips
Clifford Poland
Gene Polito
Steven B. Poster
Robert Primes
David Quaid
Earl Rath
Richard Rawlings, Jr
Frank Raymond
Gayne Rescher
Robert Richardson
Owen Roizman
Charles Rosher, Jr.
Edward Rio Rotunno
Giuseppe Rotunno
Juan Ruiz-Anchia
Marvin Rush
Paul Ryan
Ted Saizis
Vincent Saizis
Mikael Salomon
Nancy Schreiber
Fred Schuler
Steven Shaw
Richard Shore
Sandi Sissel
Bradley B. Six
Leonard South
William Spencer
Frank Stanley
Bob Steadman
Bob Stevens
David Stewart
Vittorio Storaro
Harry Stradling, Jr.
Alfred Taylor
William Taylor
Don Thorin
John Toll
Mario Tosi
Luciano Tovoli
Jost Vacano
Theo Van de Sande
Kees Van Oostrum
Ron Vargas
William Wages
Roy H. Wagner
Ric Waite
John F. Warren
Michael Watkins
Jonathan West
Joseph Westheimer
Haskell Wexler
Charles Wheeler
Jack Whitman
Gordon Willis
Jack Woolf
Ralph Woolsey
Lothrop Worth
Richard Yuricich
Vilmos Zsigmond
Kenneth Zunder

Associate Members
Don Adams
Joerg Agin
Alan Albert
Gene Allen
Volker Bahnemann
Emerson R. Barlow
Thomas M. Barron
Larry Barton
Howard Bell
John Bickford
Gary Borton
William Brodersen
Garrett Brown
Vincent Carabello
Edward Carlin
Leonard Chapman
Claude Chevereau
Denny Clairmont
Peter Comandini
Robert B. Creamer
Daniel Curry
Carlos D. DeMattos
Richard DiBona
Edmund M. Di Giulio
Don Donigi
Jonathan Erland
John Farrand
Bob Fisher
Milton Forman
Frederick Franzwa
Douglas Fries
Richard B. Glickman
William Hansard
Roman I. Harte
William R. Herndon
Philip Hetos
Robert C. Hummel
George Hutchison
Donald W. Iwerks
Ron Jarvis
Mac Jibiki
Michael Johnson
Paul Kenworthy
Larry H. Kingen
Ron Koch
Ron Lambert
Tracy Langan
Howard T. LaZare
Lou Levinson
Grant Loucks
Steven E. Manios
John L. Mason
Albert L. Mayer
Andy McIntyre
Stan Miller
Walter H. Mills
George Milton
Rami Mina
Tak Miyagishima
Dash Morrison
F. Jack Napor
Ian A. Neil
Otto Nemenz
Ernst Nettmann
Mickel Niehenke
Marty Oppenheimer
H.A. Parker
Larry Parker
Michael Parker
Warren Parker
Doug Pentek
Henri-Dominique Petit
Ed Phillips
Carl Porcello
Phil Radin
Don Rogers
Andy Romanoff
Bill Russell
John Russell
Kish Sadhvani
David Samuelson
Sydney Samuelson
James Sater
Garrett Smith
Marvin Stern
Richard J. Stumpf
Abbott Sydney
Jack Teahan
Ira Tiffen
Arthur Tostado
George Turner
Richard Vetter
Joe Violante
Jerry Virnig
Jan Yarbrough
Nazir Zaidi

Honorary Members
Col. Edwin E. Aldrin Jr.
Neil A. Armstrong
Col. Michael Collins
David MacDonald
Gregory Peck
Barbara Prevedel
Dr. Roderick T. Ryan
Bud Stone
Richard F. Walsh

From the Clubhouse

The ASC has welcomed four new members into its fold: active members Steven Shaw and Jonathan West and associate members Iain Neil and Tom Barron.

Steven Shaw, a graduate of Vanderbilt University, entered the film industry as an actor after a stint in the U.S. Army Artillery. It was during his acting days that he met Academy Award-winning cinematographer Geoffrey Unsworth, from whom he caught his enthusiasm for the magic of the camera. After working in commercials for several years he entered the union in 1976, and was soon working for Allen Daviau, ASC, first in commercials and then on a television movie and *E.T.*

After *E.T.* Shaw moved up to camera operator and soon after to director of photography, in which capacity he worked on several low-budget films between 1983 and 1986. Since then he has shot almost 75 hours of network and cable television and several features: TNT's *Forgotten Prisoners: The Amnesty Files* (which earned an ACE Award nomination for Best Cinematography), the made-for-television *A Woman of Independent Means*, *Remember*, *The Preppy Murder*, and *The Ryan White Story*; the series *Legends* (for which he also shot the pilot), *Crossroads*, and *I'll Fly Away*; and the pilot to *Supercop*, among other credits. His feature work includes the upcoming *Johnny & Clyde*, as well as *Grandpa's Funeral*, *Hear No Evil*, *Wish Man*, and *Driftwood*.

Shaw is a member of the Academy of Television Arts and Sciences, the Directors Guild, and the Screen Actors Guild.

Jonathan West worked as a tour guide at Universal Studios while studying theater in college, and spent off-hours observing the activity in the studio's backlots and stages. As an Air Force cameraman he shot, edited and narrated many documentaries throughout his four-year stint, and at the same time continued his involvement with local theater as an actor and lighting designer. After his discharge, he freelanced as a director/cameraman/editor on client-sponsored film projects, and in 1974 was accepted into the union as an assistant cameraman. He was promoted to camera operator while working for MTM Enterprises, a position he held for seven years, during which time he worked in both features and television and spent his free time shooting small projects with first-time directors. Touchstone promoted him to director of photography in 1985, and in 1988 he became a member of the Academy of Television Arts and Sciences, where he participates on the Blue Ribbon panels for the annual Emmy Awards.

West's credits include the pilots to the series *Hope*, *San Berdoo*, *Doogie Howser, M.D.* and *Heartbeat*, as well as the television specials *The Visit*, *The Big Bang*, *The Whereabouts of Jenny* (which earned an Emmy nomination for Best Cinematography in 1991), *Finish Line*, *A Small Good Thing*, and PBS Great Performances' *Tales from the Hollywood Hills: The Golden Land*.

Other television credits are *Eerie, Indiana*, including special effects photography, *Island Son*, *Private Eye*, two seasons of *Star Trek: The Next Generation*, *WIOU*, *Heartbeat*, and *Our House*. West also served as director of photography on the features *A Sinful Life* and *Munchies*, and on numerous commercials, industrials and music videos. He is presently shooting principal photography and digital visual effects elements for *Star Trek: Deep Space Nine*.

Thomas Barron, executive director at Image G Productions, has worked in special effects photography for two decades. A graduate of Cal Arts, where he worked as cinematographer on several student films, his first Hollywood job was as assistant to the vice president for research and development of Todd-AO Corporation, where he worked with anamorphic and other widescreen processes. He then joined Robert Abel's fledgling special effects company just as *Star Wars* went into production. Much of the award-winning work that became the Abel trademark included the precise and fluid camera motion of Barron's rigs. Barron also developed and applied motion-control move generation software under the trade name Deccam; the use of this software in conjunction with early stepper-motor motion control machines was noted in an Academy technical and scientific achievement award a decade later. Other inventions were the trailer-mounted real-time robotic camera crane, the Bulldog, which was used under his direction as effects director of photography on *Flight of the Intruder*, and the Pocket Pal cinematography programs.

After Abel's studio closed, Barron's own company, Image G, was assigned the effects production of *Star Trek: The Next Generation*, and continued the relationship with Paramount Studios on the subsequent series *Deep Space Nine* and *Voyager*. The company's work has earned five Emmy Awards during nine seasons with the shows.

Iain Neil, senior vice president of optics at Panavision and a designer at Scotoptix, was previously manager of systems engineering at Ernst Leitz in Canada and head of optical design at Barr & Stroud in Scotland. He holds over 150 existing worldwide patents in visual and infrared optical design, systems for defense, industrial and consumer applications including HDTV, and has received five awards for lenses and optical systems from the AMPAS.

His work at Panavision has included the design and development of the Primo series of spherical and anamorphic lenses, both fixed focal length and zooms, video systems, viewfinder optics and HDTV optical systems.. In 1990 he founded Scotoptix, a company involved in the optical design and system engineering of products for industrial, consumer, and defense applications, specializing in the design and manufacture of zoom lens systems. The company's clients include Sony, Apogee, Century Precision Optics, Matsushita, and Foto-Kem/Foto-Tronics.

Net Gains in Cyberspace

by Curtis Clark, ASC

1995 is being widely proclaimed as the year that the Internet became the prime arena for the emerging "information superhighway." Although proprietary online networks like America Online, Compuserve and Prodigy continue to fuel the growth of network connectivity, in large part their success has been contingent on providing what is called "gateway access" to at least two of the largest growth areas of the Internet, e-mail and the graphical showcase of the World Wide Web. In fact, the networks all compete intensely with each other to reassure potential new subscribers that their Internet access is better than that of their competitors.

As mercurial developments in computer and telecommunications technologies have converged, the Internet has become the main catalyst for — as well as the principal focus of — their synergistic fusion. Knowledgeable industry analysts foresee network computing reorienting computer usage for both business and leisure. Already a vast new information and entertainment terrain is being constructed that will change, forever, the ways in which we communicate. This convergence, which has become known as "cyberspace," will impact vital aspects of the way society functions. Both e-mail and the World Wide Web, have already begun to influence the way we interact socially.

For the first time in recent history we are experiencing how information technology developments are remapping the parameters of social connections. The unrestrictive interactive nature of the Internet provides new possibilities for direct participation in the flow of information/data in our society. Our role as "participants" in this new communications process is a radical paradigm shift from the traditionally passive role as "consumers" of information and entertainment. The symbolic term "host" is used to designate any person or organization whose computer is connected either directly to the "network backbone" of the Internet as a separate domain or via an unrestricted "dial-up" (PPP or SLIP) account supplied by an Internet Service Provider. In principle, any host, whether an individual or organization, participates on the Internet as an equal player in terms of technical potential to send/publish text/data/images/sound, limited only by the host computer's processor and memory specs. The connection speed governing data rate transfers to the Internet affects only the efficiency with which one is connected (e.g., digital vs. analog — not to mention the high- speed T1 and T3 direct connections), but does not alter the inherent democratic nature of the access. No one person or organization can control the Internet's functioning. When this "network of networks" is able to integrate both fiberoptic cable and advanced copperwire technologies for all data and image transmission, the dramatic increase in available bandwidth will provide full-motion video that supports high-definition images. At that point, the networked computer terminal will indeed converge with the TV, but in a way that will transform our conventional experience of broadcast/cable TV from that of passive consumer to interactive participant. The traditional distinctions between producers and consumers of information will become increasingly blurred. The traditional divisions of labor, which have not only defined our society since its inception, but also have been the matrix for its economic and political power, will ultimately be threatened by the very technology it has so feverishly been developing.

New dynamic forces of production are already being generated which have the potential to give a revitalized and practical meaning to those genuinely sacred documents of our society which inscribe our cherished freedoms of speech and press. As the vanguard of the information superhighway, the Internet is leading a telecommunications revolution that is indeed testing the very notions which define democratic freedom of speech, along with the right to uncensored access of information. Highly mobilized and motivated sectarian ideological forces are working relentlessly to generate an atmosphere of social paranoia using gross misrepresentations and specious issues to obfuscate the true social and political significance of these changes. Governmental censorship imposed on the Internet in the current Telecommunications Bill being passed by Congress indicates a measure of success for the antidemocratic forces of darkness. The strength of their success can be considered inversely proportional to the general public awareness of the true issues. The more that people experience what the Internet actually is and participate in what is has to offer, the more they will realize that they can become meaningful participants in its development and let its interactive potential enrich their lives.

Individuals and groups (business as well as institutional) who are keen enough to recognize this radical shift affecting our future are responding in increasing numbers to meet this challenge. Whether the motive is to position themselves for business advantage or cultural impact, they are firmly establishing their cyberspace presence. Hopefully, the ASC and *American Cinematographer* magazine will soon be counted among their number.

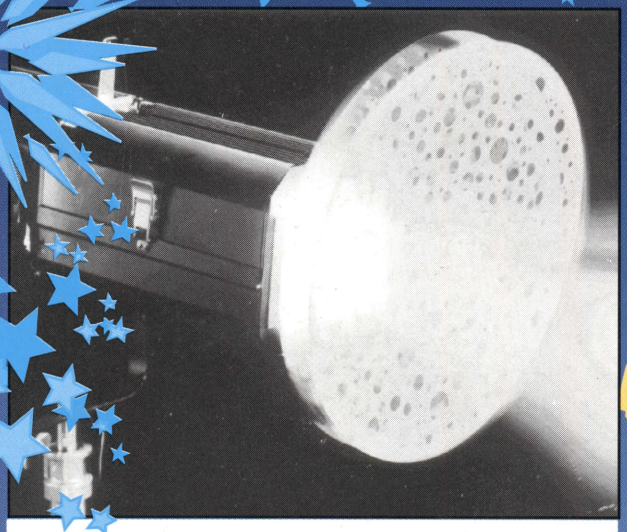
Eventually, the Internet will become as essential to our lives as the telephone and postal services are today. Since it will also converge with TV and radio, it will redefine how this new integrated system of telecommunications services will impact our day-to-day living. Computer networking and information systems technologies are not in themselves panaceas; however, they have inadvertently focused attention on issues of substance that can all too easily be transformed into soundbite platitudes in the mouths of opportunistic politicians. Perhaps one reason why so many members of Congress have so readily endorsed the reactionary censorship proposals regarding Internet free speech is an intuitive anxiety that the most vulnerable job function threatened by an enlightened population is their own.

This discussion of online technology and the Internet will continue in an upcoming issue, focusing on how these new tools will be utilized by the ASC and American Cinematographer.

A TRADITION OF EXCELLENCE

PANAVISION®

BIG EFFECTS LITTLE BUCKS



Gam Spin/FX™

- Flickers • Wobbles • Gyrations • Rustles • Ripples!
- Gam Spin/FX offers rich array of kinetic effects
- Variable speed double disc drive
- Projects gentle to frantic animated patterns
- Rotation speed controlled by your dimmer
- Eight pattern discs combine for 72 effects
- Effects discs rotate in opposition to each other
- Add GamColor gels for moving color effects
- Fits Fresnels, PARs and ellipsoidal spotlights
- Gam Spin/FX available in 120V & 230V models
- Combine different FX discs, try different speeds & GamColor gels—the combinations are infinite!

TwinSpin™

- The Variable Speed Pattern Rotator
- Rotates two "B" patterns in opposite directions
- Slides easily into slot of a 6 inch ellipsoidal
- Patterns held by stainless steel retaining rings
- Control speeds with your dimmer
- Available in 2 speed ranges
- Mix & match still and moving patterns for a multitude of special lighting effects

GAM PRODUCTS

The Great American Market
826 NORTH COLE AVENUE • HOLLYWOOD CA 90038
VOICE 213/461-0200 • FAX 213/461-4308

© 1995